

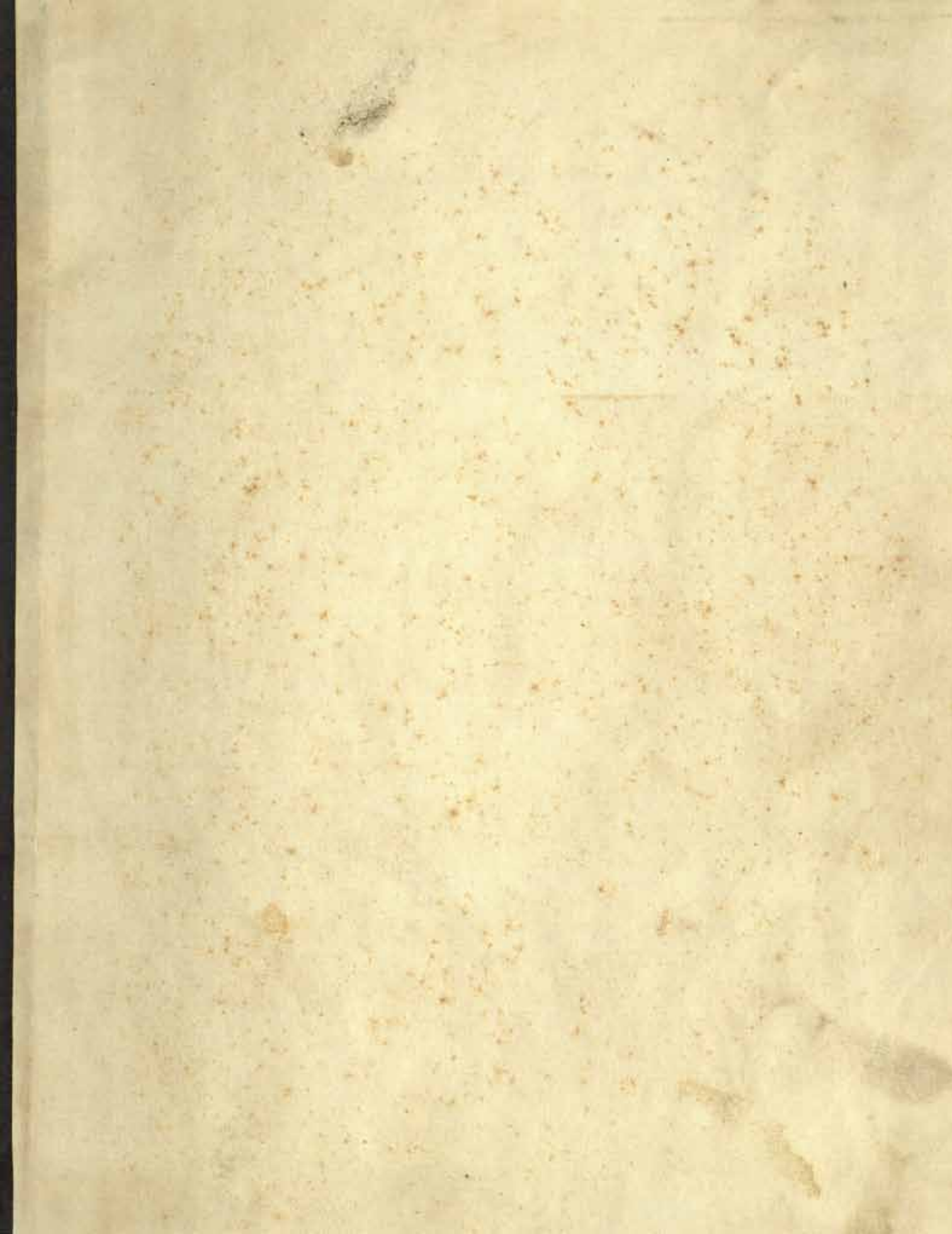
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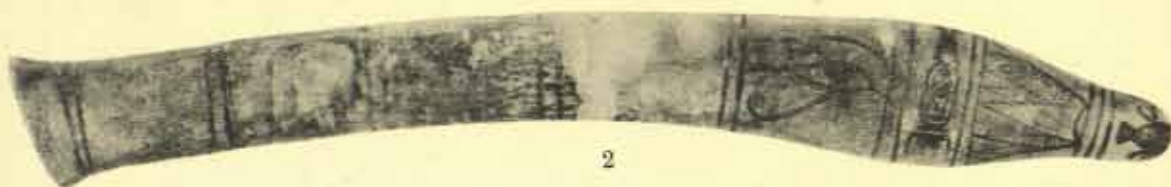
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1. Kohl-tube ; 2. Throwstick ; 3. Finger-rings. (All faience.)

OBJECTS OF TUT'ANKHAMÛN AT LEIDEN

OBJECTS OF TUTANKHAMUN IN THE RIJKSMUSEUM OF ANTIQUITIES AT LEIDEN

By W. D. VAN WIJNGAARDEN

With Pl. i



In Vol. 14 of this *Journal*, pp. 74-7, with Pls. viii-xi, a description was given by the Dr. H. R. Hall of some objects of Tutankhamun in the British Museum. Some of these (nos. 2, 3, 4) were probably among the objects in the king's tomb; they must have left it as the result of some ancient plundering, for they had all been bought, and had been in the Museum for many years, before the discovery of the tomb in November 1922. It would be very interesting to ascertain what museums and collections also contained objects of Tutankhamun before 1922. The Museum of Antiquities at Leiden possesses a few of them, of which the description follows:

1. Deep blue faience kohl-tube, imitating a reed and of simple cylindrical form. On the surface are inscriptions in black of Tutankhamun: 'Good God, Lord of the two Lands, Nebkheprurê', and of his queen 'the Great King's-wife Ankhesenamun, may she live!' (Pl. i, 1). The groove round the tube below the queen's name is intended to imitate the joint in the actual reed. Height 14.9 cm.; diameter 2 cm. This object shows great similarity to the two similar pieces in the British Museum described by Hall (*JEA* 14, Pl. ix, p. 74; British Museum, *A Guide to the Fourth, Fifth and Sixth Egyptian Rooms* (1922), p. 268, Nos. 52, 53).

2. Blue faience funerary throwstick of Tutankhamun, inscribed with the king's pre-nomen in black in the usual form: Nebkheprurê, and ornamented with lotus-flowers and *wejat*-eyes (Pl. i, 2). Length 37.5 cm. A similar blue-glazed boomerang, inscribed with the name of Amenophis IV or Akhenaten, is in the British Museum (*op. cit.*, pp. 144, 145, No. 57). There is also a fragment of a similar piece inscribed with the names of Tutankhamun, described by Hall in *JEA* 14, Pl. ix, p. 75; British Museum (*op. cit.*, p. 145, No. 59).

3. A group of eight blue faience rings inscribed with the pre-nomen of Tutankhamun: Nebkheprurê; diameter 2 cm. Seven of these are represented on Pl. i, 3.

All these objects have been in the Egyptian Department of the Leiden Museum for many years, and are described in the old catalogue (C. Leemans, *Description raisonnée des monuments égyptiens du musée d'antiquités des Pays-Bas* (1840), C. 41, p. 46; E. 41, p. 64; G. 216-226, p. 72); they formed part of the well-known collection of J. d'Anastasy, which was bought for the Museum in 1828.

In this respect also there is a resemblance between the London and the Leiden objects of Tutankhamun, since the former have been in the Egyptian collection in the British Museum for many years. They, too, may have been once in the possession of d'Anastasy, whose later collections were bought for the British Museum in Paris in 1857. If so, we have a case similar to that of the Demotic Magical Papyrus of London and Leiden. This manuscript was discovered at Thebes with other papyri in the early part of the last century, and was bought by d'Anastasy, who was at that time Danish consul at Alexandria and made

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PHYSICO-CHEMICAL EXAMINATION OF A SCARAB OF TUTHMOSIS IV BEARING THE NAME OF THE GOD ATEN

By F. A. BANNISTER AND H. J. PLENDERLEITH

With Plates ii, iii

In 1931 Mr. Alan W. Shorter published an account of two scarabs in the possession of the Rev. G. D. Nash,¹ and that of Tuthmosis IV in particular attracted unusual attention because of a reference in the text to the god Aten, whose worship later developed into the famous 'heresy' of Amenophis IV.

The scarab had been examined by a number of Egyptologists and its authenticity considered indisputable. It was accordingly published as an unquestioned document of the first importance to students of Egyptian history. But, as so often happens in like cases, a protagonist was not wanting for the opposing view-point, and later in the same year Prof. Heinrich Schäfer expressed his distrust in an article entitled *Ein angeblicher Skarabäus Tuthmosis' des IV. mit Nennung des Gottes Aton*;² his opinion was apparently based on evidence afforded by photographs and on considerations of textual criticism.

There were three possibilities: the scarab was either (1) genuine in its entirety, or (2) a genuine antiquity bearing an inscription which had been in modern times cut,³ re-cut, or tampered with, or (3) entirely false. It seemed that a physico-chemical examination might prove a fruitful avenue of approach, and the scarab was referred for this purpose to the British Museum Laboratories. It was considered to be clearly a case for collaboration between the Museum's Research (archaeological) Laboratory at Bloomsbury and the laboratory of the Department of Mineralogy at the British Museum (Natural History), South Kensington; the value of such a joint attack may be judged by the present communication.

The scarab, as received, was concealed by grime. It was found possible by the use of organic solvents to remove a coating of wax, and incidentally much of the dirt, but not by any means all of the French chalk which filled the inscription (see Pl. ii, 1). The wax had no doubt been applied at one time in making a cast or taking an impression. The cleaned scarab was of yellowish slate colour, and was seen to be worn and cracked like other steatitic scarabs of the Eighteenth Dynasty. There was nothing to indicate that the material had been recently worked, or that the effect of weathering had been artificially produced. The condition of the face was identical in this respect with the back, so far as could be judged by fluorescent and microscopic examination, i.e. there was no evidence of re-cutting.

Examination was now made for the presence of glaze, of which no visible sign remained, although the astonishing hardness of the material (6 on Mohs' scale) seemed significant. The residual yellowish smear appearing in the deeper hollows as well as in the inscription

¹ *JEA* 17, 23-5.

² *Orientalistische Literaturzeitung* 1931, No. 9/10, 788.

³ This view is suggested by Wiedemann in *ZAS* 67, 126, in an article entitled *Neuzeitliche Fälscherkünste*.

had been ascribed to staining by wax. A test to confirm this proved negative, however; it gave, unexpectedly, an indication of copper, and confirmatory tests before the blow-pipe and by chemical means afforded ample proof that the yellow smear was not wax but the remains of a decomposed copper glaze.

It was then discovered that the hardness of the scarab was due to the steatite having been baked, the hard glassy quality of the glaze having long since disappeared. That the latter had at one time covered the body was evident from microscopic examination of a chipped portion; see the photo-micrograph on Pl. ii, 2.

In order to carry the research farther it was necessary to select scarabs for comparative purposes, and choice fell on a large scarab of Amenophis III (B.M. 4095) and a small scarab of Tuthmosis IV (B.M. 32398),¹ because the conditions of the surface in each case seemed to approximate to that of the scarab under examination. Experiments were also made with the naturally-occurring mineral steatite, a compact variety of talc,² in order to determine the effect of baking on the physical characteristics of the material, and the research eventually resolved itself into an investigation of samples of all materials by the X-ray powder method (F.A.B.) since the material available was insufficient for chemical analysis.

THE MINERAL BODY

A slice from a pale-buff, fine-grained specimen of steatite from Göpfersgrün, Wunsiedel, Bavaria (B.M. 59496) was first baked for 2 hours at 600° C.; no appreciable loss of weight was recorded and the hardness remained unaltered (1 on Mohs' scale). On rebaking at a higher temperature (900° C. for one hour), however, the hardness increased from 1 up to 7 and a loss of weight equivalent to 2.5 per cent. was observed. The degree of hardness of this material now approximated to that ascertained in the case of all three scarabs under examination. The refractive index and specific gravity of the steatite were determined before and after baking and compared with corresponding figures obtained for the scarabs. X-ray powder photographs³ were then taken of flakes from the baked steatite as well as the unbaked, and also from specimens taken from the body of the scarabs.

The results were striking. The powder photographs of all three scarabs and of the steatite baked at 900° C. are identical; the corresponding photograph for the unbaked steatite is of a quite different pattern (see Pl. iii, 1-3).

The possibility that other minerals, resembling talc and used in carving (such as compact pyrophyllite or kaolinite), might yield the same powder photographs was definitely disproved.

X-ray methods constitute the most reliable test for identity since they are independent of the external form, accidental colour, porosity, etc. of the specimens, and reveal the crystalline structure of the material itself.

It may be concluded, therefore, that the material of all three scarabs examined in this way is baked steatite. Moreover, these experiments have served to indicate the temperature at which the scarabs have been baked, a point which might well be of significance in exposing a counterfeit.

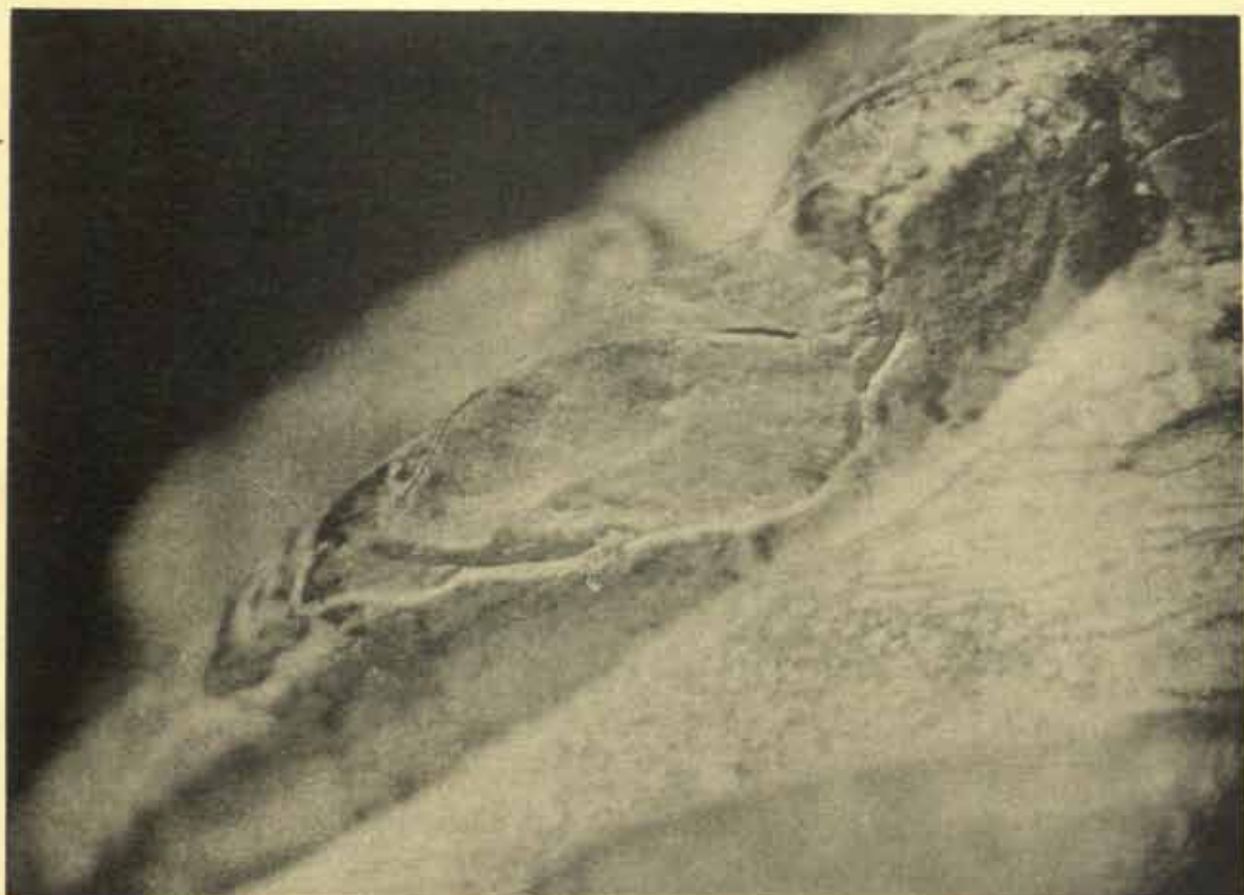
¹ Nos. 1719 and 1692 respectively in Hall, *Catalogue of Egyptian Scarabs, etc. in the British Museum*, vol. I.

² Talc is a hydrated magnesium silicate, $Mg_3(OH)_2Si_4O_{10}$, and steatite (synonyms soapstone, French chalk) is the well-known compact variety used for carving.

³ An X-ray powder photograph can be obtained from a minute fragment of fine-grained compact material just large enough to be visible for centring in a fine beam of monochromatic X-rays. The specimen is centred on the axis of a cylindrical camera and the film is covered by black paper kept in position by metal rings. Exposure times of about two hours are necessary to obtain well-marked diffraction rings. The film is protected from the direct X-ray beam by a lead cup which casts a shadow in the centre of the three powder photographs.—F. A. B.



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1. Inscribed face of the Aten scarab of Tuthmosis IV, showing residual glaze, French chalk, and wax in the letters of the inscription. Scale 2 : 1.
2. Chipped edge of the Aten scarab of Tuthmosis IV, showing the film of decomposed glaze on the surface. Scale 12 : 1.

The following table summarizes certain of the physical characteristics:

	Steatite		Scarabs ¹		
	Unbaked	Baked at 900° C.	A	B	C
Refractive Index . . .	1.570	1.590	1.578	1.580	1.580
Specific Gravity . . .	2.76	2.81	2.63	2.65	2.75
Hardness . . .	1	7	6	5	7

(The refractive indices were obtained by the Becke method and are accurate to ± 0.002 .)

The refractive index values are not so high as those for baked steatite, indicating that the baking temperature was perhaps somewhat lower than 900° C.²

The low values of the specific gravity recorded for flakes from all three scarabs compared with that for baked steatite are no doubt due to variable porosity of the surface of the scarabs. The surfaces are seen to be granular under the microscope, and this is to be accounted for by the alterations which in each case have removed nearly all the glaze.

THE GLAZE

The surface of all the scarabs has undergone considerable alteration, for no trace of green glaze remains, and the yellowish soft film containing copper can only be found in the hollows and portions protected from abrasion. As already stated, the Aten scarab had to be thoroughly cleaned before the glaze was revealed. Mr. Shorter, describing the scarab before it was cleaned, states (*op. cit.*, p. 23): 'All glaze has perished'.

Some light is thrown on the probable cause of decay by the observation that, as was demonstrated by washing in distilled water, a quantity of alkaline chloride still remained in the interstices of the scarab. In the case of the other two scarabs tiny white incrustations of saline matter were evident on the surface, the incrustations in each case consisting largely of sodium chloride and perhaps corresponding to natron.

Tiny scrapings of the three glazes were subjected to micro-tests and all were found to contain copper. Lead, which is known to be present in other green copper glazes (Chinese, etc.), was tested for but found absent. Finally, a portion of each of the three glazes was fed into a carbon arc, and the spectra produced by a quartz prism were photographed, using for comparison a standard R.U. powder³ and a Hartmann diaphragm. This diaphragm permits five spectra to be photographed one above the other without moving the photographic plate

¹ Scarab A: Tuthmosis IV bearing the name of the god Aten; Scarab B: Amenophis III (B.M. 4095); Scarab C: Tuthmosis IV (B.M. 32398).

² X-ray studies of powdered talc baked at various temperatures have been made by H. Heraldson (*Neues Jahrb. Stuttgart*, 1930, Abt. A. Beil. Bd., 61, p. 139), and by R. H. Ewell, E. N. Bunting and R. F. Geller (*Journ. Research National Bureau Standards*, Washington, 1935, vol. 15, p. 551). Heraldson's data for powder photographs of talc baked at 900° C. are in good agreement with mine. He has shown, moreover, that talc baked for 24 hours at 800° C. still gives the powder photograph of unchanged talc, and this is consistent with his observations of water lost at various temperatures. Talc loses only 0.45 per cent of its weight up to 800° C. but becomes completely dehydrated between 900° and 1000° C. (loss of weight 4.86 per cent.). The more recent work by Ewell, Bunting, and Geller has shown that the unbaked talc pattern persists up to 840° C., and that the chief crystalline component formed between 840° C. and 1200° C. is enstatite, MgSiO₃. They also give specific gravity and refractive index data for talc baked at 840° C. viz. 2.91 and 1.585 to 1.595 respectively. It is therefore probable that in ancient times the scarabs of steatite reached temperatures between 840° and 900° C. during glazing.—F. A. B.

³ R.U. powder is composed of a base of Mg, Ca, and Zn oxides and small, varying amounts of 51 elements in such proportions that only a few of the most sensitive lines (*raies ultimes*) appear in the emission spectra.

between successive exposures. One portion of the spectrographic record from wave-lengths 2700 to 3300 Å. is reproduced in Pl. iii, 4. The elements detected in all three glazes were silicon, magnesium, calcium, iron, and copper, no lead lines being visible. The tiny scrapings of glaze were, of course, mixed with some steatite matrix; hence the silicon and magnesium lines. Many chemical analyses of steatite also show the presence of small quantities of calcium and iron. It is therefore uncertain whether either the iron or calcium or both are proper to the glaze or the steatite matrix. Probably the original green colour of the glaze was due entirely to the copper content. Whether the glaze applied contained powdered malachite and little else is difficult to decide, owing to the subsequent baking and then decomposition of the glaze.

CONCLUSION

It has been established that the material of the Tuthmosis IV scarab bearing the name of the god Aten is comparable in every laboratory test which it has been possible to carry out with that of two other well-authenticated scarabs of the period; that the steatite bodies have been baked to the same temperature (about 900° C.) in each case; that the glaze has become decomposed in the same manner in all three scarabs; and that the surface of the inscribed face of the Aten scarab is similar to that of the back, obverse and reverse corresponding in porosity and in quality of residual glaze.

It is an important point that the small residue of glaze was actually not detected until after the removal of wax and grime by solvents. Even after cleaning, it was almost of the same colour as the body, and its true nature was only discovered by a chemical test. Such subtlety on the part of a forger—to decompose a glaze to a point where its existence was normally not recognizable, even granted that he could accomplish this without leaving tell-tale marks on the scarab—would be more likely to give rise to conditions which would awaken suspicion than to further his intentions.

As a result of an exacting examination it can be concluded that on physico-chemical grounds there is every reason to believe the scarab to be genuine. There is no technical evidence of any kind to warrant the suggestion, either that it is an old scarab that has been re-cut, or that it is a falsification.



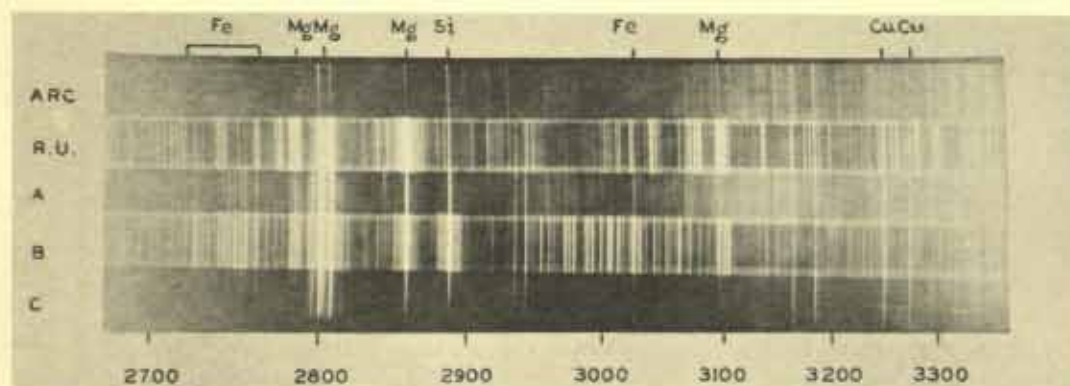
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X-ray powder photographs (1-3) and spectrographic record (4) of Egyptian scarabs and steatite.

Fig. 1, scarab A; Fig. 2, steatite B.M. 59496, baked at 900° C.; Fig. 3, steatite B.M. 59496, unbaked. The photographs were taken with unfiltered copper radiation $\lambda = 1.539 \text{ \AA}$. in a cylindrical camera, diameter 6.04 cm. A length of 10 cm. on all the original films is equivalent to 8 cm. on the reproduced figures. Fig. 4, spectrographic record of scrapings of glaze from scarabs A, B, and C, of R.U. powder, and of the graphite electrodes above. The lines corresponding to B are stronger than those of A and C since B yielded more glaze for investigation.

EGYPT AND THE ROMAN EMPIRE: THE ΔΕΚΑΠΡΩΤΟΙ

By E. G. TURNER

SINCE the study of papyri claimed the interest of historians towards the close of the last century, one of the more important questions continually challenging discussion has been that of the administrative relation between Egypt and the Roman Empire. The wealth of documents presents a body of evidence from which it is sometimes difficult to avoid the temptation to generalize. But there has also been a tacitly accepted hypothesis that Egypt, the treasury of much Hellenistic experience, was the source of many institutions and much administrative practice in the Roman Empire. Caesar, Antonius, and as some have said, Augustus, were markedly indebted to her political store. Subsequently, it is thought, there was a less obvious but more subtle process of contamination, one result of which was the development in the Empire of a system of *munera* and *leitourgiai*. Now there certainly was such a system, fully worked out, in Egypt at a quite early date. It is our duty to ask the question, Is it precedent or parallel?; and in the hope of contributing to an answer, the institution of the δέκαπρωτοί is to be studied in this paper.¹

Δέκαπρωτοί as liturgical officers are found in both Egypt and the Empire; and earlier writers have suggested that they performed a *munus* in which the central government was specially interested. Thus they should prove a fruitful subject of inquiry for our present thesis. But previous research² has conceived the institution as too static. Evidence from different periods and even that relating to different institutions has been indiscriminately connected.³ Here an attempt will be made to study the δέκαπρωτοί as far as possible in their development. The evidence from Egypt, since it is by far the fullest and most clearly dated, will be set down and discussed first; it will be followed by a survey of the occurrence of δέκαπρωτοί in the Empire, and an examination of their development. For the first part of the paper δέκαπρωτοί only are to be examined. Afterwards there will be some discussion of their relation to the supposed *decemprimi* of the West, and other similar institutions.

In Egypt, δέκαπρωτοί are not found till the third century, and it is generally assumed that they owe their introduction to the visit of Severus in A.D. 200.⁴ Apart from one instance

¹ The writer wishes to thank all who have helped him, especially Dr. H. I. Bell and Mr. H. M. Laist.

² The usual view is given by Marquardt, *Staatsverwaltung* 1², 213 ff. Cf. also Brandis, *PW* IV, 2417 ff.; Chapot, *La Province rom. procons. d'Asie*, 272 ff. Liebenam gives a list of δέκαπρωτοί in his *Städteverwaltung*, 552; and Rostovtzeff discusses many points connected with them in the notes to Chaps. VIII and IX of his *Social and Economic History*.

³ As, e.g. by Seeck, in his paper 'Decemprimat und Dekaprotie' in *Klio*, 1, 147 ff. Seeck identified *decemprimi*, δέκαπρωτοί, *undecimprini*, εικοσαπρωτοί, with *decemviri*, *undecimviri*, *vigintiviri* etc., and concluded that *decemprini*-δέκαπρωτοί formed a universal institution in the Empire even in the first century. The evidence does not support this view; and his identifications have been rejected by subsequent writers, cf. Hirschfeld, *Kaiserl. Verwaltungsbeamten*, p. 74, n. 6.

⁴ V. Wilcken, *Gr. Ostraka* 1, 626 ff.; *Grundzüge*, 217 ff.; Jouguet, *Vie municipale*, 366 ff., 389 ff.; Oertel, *Die Liturgie*, 211 ff.; Calderini, *Θησαυροί* (*Studi della scuola papirologica* IV), 1924, 95 ff.

from Thebes¹ and one from the Mendesian nome,² the material relates to the Fayyūm and the Hermopolite and Oxyrhynchite nomes.³ The institution seems to have undergone little development in Egypt; save that a few years were needed for its organization to be perfected, little change is observable till Diocletian. The *δεκάπρωτοι* disappear in the early fourth century. According to Gelzer⁴ this was probably at the time of the reorganization of the nomes into numbered *παῖνοι* instead of toparchies, in A.D. 307–10. But recent discoveries⁵ make it more likely that the process of administrative reform and the introduction into Egypt of a full municipal system, established in piecemeal fashion, began somewhat earlier than is postulated by the traditional view.

The *δεκάπρωτοι* were based on the *metropolis* of each nome, but operated by toparchies in colleges. According to Oertel (p. 211), the general rule was for each toparchy to be supervised by a college of two *δεκάπρωτοι*.⁶ In the Fayyūm, in the *merides* of Heraclides and Themistes, toparchies are paired off together (odd and even numbers together in Heraclides, even and even or odd and odd in Themistes).⁷ Ordinarily, therefore, four *δεκάπρωτοι* are found together in the Fayyūm, and this number appears in e.g. *P. Fay.* 85. But the cooperation of the full college was apparently not essential in issuing a receipt. For example, only three *δεκάπρωτοι* appear in *P. Fior.* 7, perhaps in *P. Thead.* 27; two in *BGU* 1611;⁸ one only in *P. Teb. II* 368, 581, where the competence of the *δεκάπρωτος* is apparently restricted to one toparchy. Instances in which more than four *δεκάπρωτοι* appear to be concerned are due to special circumstances.⁹

¹ *Sammelbuch*, 4340.

² *PSI* 303.

³ *Δεκάπρωτος* receipts:

FAYYŪM: *P. Fior.* 7, *P. Fay.* 85 (A.D. 247); *P. Lips.* 83 (257); *BGU* 1610, probably a *δεκάπρωτος* receipt (259); *BGU* 579 = *W. Chr.* 279 (263); *P. Tebt.* 368 (265); *ibid.* 581 (268); *P. Fior.* 26, probably for money payments (273); *BGU* 1611 (283); *P. Thead.* 26 and 27 (296–298); *Fay. Ostr.* 23 (298); *P. Merton ined.* (I have been allowed to see this through the kindness of Dr. Bell), coll. 8, 10, 13, 17, 18 (298–300).

HERMOPOLIS: *P. Lond.* III, p. 62, n. 1157, recto, for money payments (227); *BGU* 743, 744, and 552–7 (261–3); *P. Lond.* II, p. 53, n. 1239 (278–81); *BGU* 1090, 1089 (280–1); *P. Lips.* 84 (285–302).

OXYRHYNCHUS: (money payments) *P. Oxy.* 1442 (252).

⁴ *Studien zur byzantinischen Verwaltung Aegyptens*, 42.

⁵ Such hints as the stress on the *προπολιτευόμενοι* of the *πόλεις* in the edict dated A.D. 297, published by Bonk. *Ét. de Pap.* 2 (1933), no. 1; the new form of land declaration, A.D. 299, *P. Thead.* 54 and 55.

The latest mention of *δεκάπρωτοι* in Hermopolis is in A.D. 302 (*P. Lips.* 84, columns III and IV); in the Fayyūm, Gerontius of Karanis issued a 'transport' receipt on March 24th of the same year (*O. Mich.* 498). This date may well be regarded as significant, since the evidence from the Karanis sherds for this period is so full. Further, the successors to the *δεκάπρωτος* 'transport' receipts as mirrored in the ostraka from Karanis were issued by the *σινάλογοι*, and make use of a formula not previously found containing the word *μετέβαλε*. The first dated example of this class falls in Aug. 288 (*O. Mich.* 414), and in the first decade of the fourth century the type becomes common: v. e.g. *O. Mich.* 494, 501–7, 511, 512 etc.

There is also mention of *δεκάπρωτοι* in the Fayyūm in an uncertain context in *P. Amh.* 83, l. 4 = *W. Chr.* 230, c. A.D. 302–5.

⁶ Cf. e.g. *PSI* 461; *P. Lond.* III, 1157 verso = *W. Chr.* 375. Indefinite: *O. Mich.* 76 and 454 (*δεκα(πρώτων)* *Αἰρ. Σουχιδά και τῶν κοινωνῶν*).

⁷ Jouguet on *P. Thead.* 26.

⁸ Cf. editors' note; and *BGU*, 1610, if, as is probable, this receipt was issued by *δεκάπρωτοι*. Both officials give a joint receipt for the first payment made. The second, third, and fourth payments are receipted by one official only (for the last two, though made on different dates, only one receipt is given).

⁹ *P. Fior.* 26 (four names *καὶ οἱ λοιποὶ δεκάπρωτοι*) is apparently exceptional. In *P. Lips.* 83 *κληρόνομοι Μέλωνος*, the heirs of Melas were discharging his liabilities. *BGU* 579 = *W. Chr.* 279 offers a total of five names; after two appears the note *οἱ δύο γιν(μ)νασιαρχήσαντες* *ἰς χώραν ἑνός*. If *ἰς χώραν ἑνός* refers to the *δεκαπρωτεία*, it is probable that the two acted as a unit, and owed their joint appointment to a shortage of candidates with the requisite *πόρος*.

In the Hermopolite¹ and Oxyrhynchite² nomes it seems to have been the usual practice for only one δέκαπρωτος to issue the receipts.

There is no finally satisfying statement of the length of tenure of the office of δέκαπρωτος.³ Grenfell and Hunt, in their introduction to *P. Oxy.* 1410, argue for a five-year period, and there is a certain amount of evidence to support this. In *P. Oxy.* 1257 Epimachus is styled δέκαπρωτος four years after entering the office, and appears to be engaged on some transaction connected with it. Assuming that he was in office throughout,⁴ a certain Aurelius Agathos Daemon was δέκαπρωτος at Tebtunis for five years; on Nov. 1st, 263 (*BGU* 579 = *W. Chr.* 279) he was among the δέκαπρωτοι of the second and third toparchies of Heraclides; in 265 he appears as a δέκαπρωτος of the second toparchy of Polemon (*P. Teb.* II, 368), and in 268, as 'δέκαπρωτος of the second toparchy', makes out a receipt, perhaps to the same man to whom the second was issued (*P. Teb.* II, 581).⁵ But it is impossible to be certain whether these are instances of normal tenure, not prolonged by reappointment.⁶ If the case of Agathos Daemon is normal, the fact that he has changed his *meris* in the two later receipts seems to show that the particular sphere and responsibility of each δέκαπρωτος was a matter for mutual arrangement within the college, and was not specified on their appointment.

The δέκαπρωτοι acted solely on behalf of the central government, and though municipal officers by election, played no part in purely municipal administration.⁷ Their principal

¹ Aurelius Castor gives receipts for the toparchies of *Λευκοπυργίτης ἀνω καὶ κάτω, Πάτρη ἀνω καὶ κάτω* (*BGU* 552), and also *Κουσσαίτης κάτω* (*BGU* 743). In *Κουσσαίτης κάτω* he is joined by Aur. Isidorus (*BGU* 743-4).

² *P. Oxy.* 1442: cf. 1444, a list, addressed to the *strategus*, of receipts at various *thesauri*. Grenfell and Hunt suggest that the single δέκαπρωτος in the latter papyrus was concerned with only a portion of the receipts.

³ It is possible to suppose that δέκαπρωτοι were appointed either for a certain term of years, or to undertake a certain responsibility. Amundsen (*Ostraca Osloensia*, 42) states that 'the responsibility of the δέκαπρωτος was connected with a certain γένημα (or γνήματα), not a period of time'. The longest recorded period of responsibility is that of the δέκαπρωτος Ptolemaios, who supervised the transport of the crops of three successive years, A.D. 291-3 (*O. Mich.* 430, 431, 437-40, 448-51). But Amundsen's statement is based only on the evidence of receipts issued for the transport of corn. Δέκαπρωτοι, appointed through a municipal senate, had other duties than the control of a *thesaurus* or collection of money taxes, duties which are less easy to define precisely. To suppose that they were appointed for a term of years is the more adequate conception.

The division of responsibility, as illustrated by the ostraka from Karanis, is not quite so uniform as Amundsen suggests. The δέκαπρωτοι Severinus and Andriscus, in most cases concerned with the transport of the crop of A.D. 297/8 (*O. Mich.* 465-7, 469-74, 477, 490), issued a receipt in one case for that of the crop of A.D. 298/9 (*O. Mich.* 479). But the transport of this crop is in most cases the concern of the δέκαπρωτοι Horion and Philotas (*O. Mich.* 478, 481-3), in one instance of the δέκαπρωτος Leontius (*O. Mich.* 480). *P. Merton ined.* contains receipts issued during these years by δέκαπρωτοι responsible for receiving payments of corn at the *thesauri*: payments from the crop of 297/8 are receipted by Didymus (? and Heron) (col. 8); from that of 298/9 by Didymus (col. 17), and also Horion and Philotas (col. 10 and 18); from that of 299/300 by Horion and Philotas (col. 13).

⁴ That this assumption is not unreasonable is shown by the evidence given by the Michigan ostraka and *P. Merton ined.* about the activities of e.g. Horion and Philotas at Karanis from Aug. 3rd, 299, to Feb. 23rd, 301, at least. *P. Thead.* 26 and 27 show the same δέκαπρωτοι in office at Theadelphia from Sept. 13th, 296, to Oct. 28th, 298.

⁵ 'Agathodaemon' is Grenfell and Hunt's English transcription of Ἀγαθὸς Δαίμων. Cf. *Aegyptus* 13, 233.

⁶ Renomination of δέκαπρωτοι is categorically forbidden by an edict of the *catholicus* Magnus (?) Rufus (*P. Oxy.* 1410), of the end of the third or early fourth century.

⁷ It has been hinted that they were responsible for the lease of public land, or land belonging to a city. Rostovtzeff (*Social and Economic History*, p. 626, n. 56) states: 'The confiscated land which was assigned to a city was called τὰ ὑποστελλόμενα τῇ δεκαπρωτείᾳ or τὰ ὑπάρχοντα τῇ δεκαπρωτείᾳ, the *decaproti* being responsible for the revenues of such land'. But the evidence does not confirm this statement. *PSI* 187 (end of the third century) is an offer of lease ἀπὸ τῶν ὑποστελλόμενων τῇ δεκαπρωτείᾳ addressed to a man who was both *exegetes* and δέκαπρωτος of Oxyrhynchus: it seems to me that it is a private offer of lease, for the lessor is to be respon-

work was the collection of taxes, both in kind and in money.¹ One ostrakon shows a *δεκάπρωτος* in Thebes giving a receipt for four drachmae, paid on behalf of Ammon.² As would be expected, their services were most required at the village granaries or threshing floors.³ There they collected the grain due to the state from the various classes of cultivators; and at the granaries in the Fayyūm they made out certificates to the persons engaged in transporting the corn from the granaries to the river harbours.⁴ They supervised the loading of the grain for transport down the Nile, took a receipt from the *ναυκλῆροι*,⁵ and addressed lists of their accounts to the *strategus*.⁶ *P. Fior.* 231 shows a *δεκάπρωτος* in complete control

sible for the taxes on the land (ll. 15 ff. τῶν τῆς γῆς δημοσίων ὄντων πρὸς αὐτὸν τὸν δεκάπρωτον). The phrase ἀπὸ τῶν ὑποστέλλοντων τῇ δεκαπρωτείᾳ appears again in *P. Oxy.* 1502 verso (after A.D. 260), apparently a lease of land at the same village of Ision Panga. This land was in poor condition, and had been injured by floods (ll. 6 ff. διασθ[ε]ν[ο]ύ[σ]ας καὶ ἐλοβροχηθείσας). Grenfell and Hunt suggest that τὰ ὑποστέλλοντα etc. refers 'not to public land within the administrative competence of *δεκάπρωτοι*, but to land owned by them jointly in consideration of the arduous character of their duties'. In *P. Strassb.* 25 the municipal authorities of Hermopolis (ἀσπιρηταὶ φόρων πολιτικῆς οὐσίας) order a municipal tenant to pay direct to the *δεκάπρωτος*. Most probably the city owned the land, and let it on lease, but had to pay taxes on it to the government. The tenant is ordered to pay a portion of his rent to the government collector in order to save the municipal authorities the expense of collection and transmission. *P. Fior.* 19 is probably a private offer of lease.

¹ Money payments:

FAYYŪM: *P. Fior.* 26 (ὑπὲρ δημοσίας γῆς).

HERMOPOLIS: *P. Lond.* III, p. 62, n. 1157 (α (δραχμῆς) ζευγματικῶν), cf. *P. Oxy.* 1442, introd.—τελεσ(μῶν) ἀμπέλ(ων), ναυ(βίου) *CPHerm.* 127 recto = *Stud. Pal.* xx, 68, covering (a) ordinary payments (not further specified, presumably for land-tax), (b) τελό(ματος) ἀμπέλ(ων), (c) payments by κομαρχαὶ Ἰβίου Καντοῦ ὑπὲρ πρακτορίας Παλλύτεις: ἀρχινηλαταὶ Κοισσῶν ὑπὲρ ἐπιμετρήσεως Κοισσῶν: κομαρχαὶ Κοισσῶν.

OXYRHYNCHUS: *PSI* 461; *P. Oxy.* 1442 (two drachmae and one drachma tax, probably a land-tax).

² *SB* 4340. At first sight a curious levy to be raised by government agents, but the circumstances are unknown. For a parallel instance of collection of a special tax by the ordinary channels Dr. Bell refers me to the tax ὑπὲρ ἀνδριάντων, Wilcken, *Ostraka* I, 152 ff.

³ Receipts made out ἐν θησαυρῷ κόμης in the Fayyūm, e.g. *P. Thead.* 26 and 27: ἐφ' ἄλωνων at Hermopolis, e.g. *BGU* 1089, 1090. In the latter case the corn collected would be sent direct to the *thesaurus* of the metropolis. Cf. *P. Oxy.* 1255; the comarchs of the village of Ision Panga in the Oxyrhynchite nome swear to the *strategus* that they will allow no produce to be removed from the threshing-floor till the demands of the *δεκάπρωτοι* have been satisfied in full.

⁴ The 'transport' ostraca: the following is a list of those of this type issued by the *δεκάπρωτοι*: *BGU* 1703 (A.D. 228 or 244: Philadelphia); *SB* 1497–1500, *O. Mich.* 68 ('the first year following the seventh year', according to Jouguet = 249, to Amundsen = 261: Theadelphia); *O. Bruss.* and *Berl.* 83, 84, *O. Mich.* 67 (255: Tebtunis); *O. Mich.* 402 (283: Karanis); *O. Oslo* 20 (286: Fayyūm); *O. Mich.* 411 (287: Karanis); *ibid.* 419 (289), 72 (290: Thraso), 430, 431, 434–5 (292: Karanis); *ibid.* 437–440, 446 (293), 450–2 (293–4), 447–9 (294), 75–6 (295), 454 (296), 465 (298), 466–7, 469–74, 478–9 (299), 484 (299–300), 480–3 (300), 485–6, 490 (301), 498–9 (302); of undetermined date are *O. Mich.* 69 (Dionysias), 70, 380, 381 (Karanis).

According to T. Kalén, *Berliner Leihgabe griechischer Papyri*, I, p. 57 f. these ostraka are to be connected with σακεγρία, i.e. transport from the village threshing-floors to the *thesauri*; Amundsen, *Ostraca Osloensia*, pp. 40 ff., argues strongly for the traditional view that they deal with transport from the *thesauri* to the river harbours. There is not space here to enter into the details of this controversy. *O. Mich.* 329 is apparently a dossier of donkey-drivers jotted down by the *δεκάπρωτοι*.

⁵ *P. Oxy.* 1260 (A.D. 286). Three receipts were made out, two being given to the *strategus*, and one to the *δεκάπρωτος* responsible. This document is similar to *P. Oxy.* 1259 (211–12), in which the *ναυκλῆρος* receives the corn from the *σιτολογία*, and gives one of the receipts to them.

⁶ *P. Oxy.* 1444; 1527 (a list κατὰ δεκαπρωτίαν of produce in arrears). According to *P. Oxy.* 1257, l. 10, the *δεκάπρωτος* kept a double ledger of receipts: (a) τὸ χειριστικὸν οὐ προσέλαβε, (b) τὸ κατ' ἄνδρα τὰ ἐν δημοσίῳ κατακειμένον διὰ τοῦ ἐπιδοθέντος συναίρεματος τοῦ δεκαπρωτῶν μηνιαίου (= accounts submitted every month and then placed in the public record office). Probably *CPHerm.* 127 recto is such a *χειριστικόν*; it was drawn up by the *δεκάπρωτος* working at the village of Κοῦσσα in the Κοισσίτης toparchy of Hermopolis, and the

of a *thesaurus*: on receiving a note confirming payment from the state bank (ἀπολυσίδιον) he disposes of 400 *artabae* of wheat to Heroninus.¹ These tasks were previously performed by the *sitologi*, who were now subordinated to the new officers. In other respects the *δεκάπρωτοι* maintained close touch with their superiors, the *strategi*, and acted jointly with them. They were, for example, together responsible for the ἐμβολή.² One papyrus contains a list of state tenants in arrears, submitted to the *strategus* by the *δεκάπρωτοι*.³ Another is an application to purchase state lands, addressed to the *strategi* and *δεκάπρωτοι*, with the *catholicus*' subscription οἱ τῆς τοπαρχείας δεκάπρωτοι σὺν τῷ στρα(τηγῷ) τὴν παράδοσιν σοι ποιήσονται.⁴ A circular letter of A.D. 279 from the *dioecetes* is addressed στρατηγοῖς καὶ δεκαπρωτοῖς τῆς Ἐπτανομίας καὶ Ἀρσινόου, and concerns a particularly stringent supervision of dyke and canal repairs.⁵ In the new form of land declaration instituted by Diocletian a *δεκάπρωτος* appears along with three *coiuratores*, two γεωμέτραι, and a ὀριοδείκτης as assistants to the declarant.⁶

Those appointed to the position were usually men of high standing who had had a successful municipal career in their own town.⁷ Appointment was by election in the local senate on the basis of nomination by an outgoing officer.⁸ Nominees had a right of appeal, usually to the *catholicus*,⁹ and would strain every nerve to avoid τὸ ἐπεΐφθονον ὄνομα τὸ τῆς δεκαπρωτείας.¹⁰

Probably it was not the arduousness of the work to be done that rendered the office odious, though this must have been considerable,¹¹ but the fact that once elected to the office of *δεκάπρωτος* men were trapped in the administrative web so ably described by Victor Martin.¹² Responsible in every particular to their superiors, they were forced to make up losses by oppression. 'Ο *δεκάπρωτος* πολλὰ ἡμῶν ἐνοχλεῖ¹³ is only a light complaint to some.¹⁴ The correspondence of Heroninus has many letters enjoining careful attention to the demands of the *δεκάπρωτος*, and instructions to make sure to get a proper receipt.¹⁵ Often the *δεκάπρωτος* would not be able to make up his losses, and would have to suffer in his own pocket. The aspect of the liturgy as a *munus patrimonii* is stressed by those documents in

amounts were entered day by day, the extant portions covering certain dates in Φαρμοῦθι and Μεσόρη. Cf. I, col. xx, l. 15 (similarly II, iii, 12; v, 19-22): Γ(ίνεται) τῆς ε' Φαρμ[οῦ]θι χ() Κονασῶν δι(α) Ἑρμίου δεκαπρωτοῦ, where the contraction given by Wessely as χ() is probably to be resolved into χ<ε>ι(ριστικόν), or χ<ε>ι(ριστικοῦ) genitive.

¹ This is Oertel's interpretation (*Die Liturgie*, 211).

² *P. Oxy.*, I, 62 verso; a letter from a centurion who was ἐπίτης [δημοσίου] σίτου (cf. Preisigke, *Berichtigungslisten*), to the acting *strategus* of Oxyrhynchus, ordering him to summon the heirs of a dead *δεκάπρωτος* and the other *δεκάπρωτοι*, ἵνα μὴ . . . ἐνέδρα περὶ τὴν ἐμβολὴν γένηται. ³ *BGU* 7; Jouguet, *Vie municipale*, 368.

⁴ *P. Lond.*, III, p. 110, n. 1157 verso = *W. Chr.* 375.

⁵ *P. Oxy.* 1409.

⁶ *P. Thead.* 54 and 55. [See now the new papyri published by Boak, *Ét de Pap.* 3, nos. 8-11, *Iurator*, not *coiurator*, should be read; the *δεκάπρωτοι* were represented by their βοηθός.]

⁷ See the material collected by Calderini, *loc. cit.*, where their careers are given as far as they are known. In *P. Oxy.* 1204, ll. 14, 21, the *δεκαπρωτεία* is termed λειτουργία πολιτική.

⁸ *P. Oxy.* 1204 (A.D. 299), Oertel, p. 212. Cf. *P. Oxy.* 1410, l. 7, μηδεὶς εἰς δεκαπρωτεῖαν ὀνομαζέτω: *BGU* 96, 9, ὀνομαστοῦ τῆς δεκαπρωτείας.

⁹ *Ibidem* and *P. Beaugé* 4 (Maspero, *Bull.* 10, 153), though the chain of events here is not clear.

¹⁰ *P. Beaugé* 4.

¹¹ The *δεκάπρωτοι* had βοηθοί: *P. Oxy.* 1257; *P. Fior.* 338; *PSI* 945; *O. Mich.* 147.

¹² *Münch. Beiträge* 19, 102 ff.

¹³ *P. Oxy.* 1671. The writer is puzzled by the measuring system involved (τὸν λόγον τῆς μετρησέως).

¹⁴ *PSI* 807 (wrongful imprisonment); *P. Thead.* 18 (forced payment on the whole of an inheritance instead of on only a third of it); *P. Ryl.* 114 (wrongful seizure of a flock, and refusal to give receipts).

¹⁵ *P. Fior.* 162; cf. 154, 194, 214, 257. Other payment orders: *P. Strassb.* 11; *P. Ryl.* 206 (b); *P. Oxy.* 1571.

which the heirs are made liable for defaults or arrears of their fathers.¹ The burden became so serious that eventually the government, in its own interests, had to take steps to forbid a renomination.²

In the Empire there are no known instances of δεκάπρωτοι before Roman times. Outside Egypt the first inscriptional example is from Gerasa in Arabia of the year A.D. 66.³ This is contemporary with the notices in Josephus of τοὺς τῆς βουλῆς πρώτους δέκα of Tiberias (*Vita* 13, 68 ff.: cf. 57, 296; *B.J.* II, 21, 9, 639 ff.), and τοὺς πρώτους δέκα of Jerusalem. Δεκάπρωτοι are mentioned again in Arabia in the Tariff of Palmyra of A.D. 137.⁴ Farther west the earliest instances come from Lycia, and belong approximately to the time of Hadrian.⁵ They then begin to occur in the Aegean: in Andros under Pius,⁶ in Aegiale in Amorgos in A.D. 153.⁷ A reference to them in Asia is given by Aelius Aristides at approximately the same date.⁸ But the majority of instances date from the end of the second century and the third century. A long series comes from Thyateira.⁹ Another series, from Tralles, probably

¹ *P. Oxy.* 62 verso = *W. Chr.* 278 (πέμψον τοὺς κληρονόμους Ἀπολλωνίου τοῦ δεκάπρωτου); *P. Lips.* 83 (κληρονόμοι Μόλωνος act with other δεκάπρωτοι in giving a receipt); *PSI* 303 (an influential relative makes a special journey to wind up the affairs of a dead δεκάπρωτος in the interests of his heirs); *P. Merton ined.*, cols. 10, 13 and 18 (κληρονόμος) Σαρμάτου δι(ὰ) Φιλώτα, Philotas being agent for the heir of the dead official).

² *P. Oxy.* 1410. Cf. p. 9, n. 6.

³ *IGR* III, 1376. Erection of the stone (ἐπὶ τῆς ἀρχῆς Ἀπολλωνίου | Ἀριστίωνος (?) προέδρου καὶ | [Μαλχαίου] Δημητρίου δεκάπρωτου) | [διὰ βίου πόλεως]. The date has been finally settled as A.D. 66, v. C. C. McCown in *TAPA* 64 (1933), 79. The restoration of l. 2 already proposed by Kubitschek, Schwartz, and Schürer should be adopted, viz. [ἐπὶ τῆς σεβαστῆς εἰρήνης]. This is confirmed by a recently discovered duplicate, *Bulletin Am. Schools of Oriental Research* 49 (Feb. 1933), 7 ff., McCown, loc. cit., n. 8, published *AJA* 38 (1934), 511 ff.

⁴ G. A. Cooke, *North Semitic Inscriptions* 147, pp. 313 ff.

⁵ Idebessus, *IGR* III, 648, 649, 652; Arneae, *ibid.* 640. For the date cf. Hula, *Jahreshefte des Oesterr. Arch. Inst.* 5 (1902), 198 ff. The inscriptions belong to the period of transition in Lycian cities from δεκάπρωτοι to εικοσάπρωτοι.

⁶ *IG* XII, v, 724.

⁷ *IG* XII, vii, 396. Here the δεκάπρωτοι appear along with the στρατηγοί as presidents of the municipal council. It is a mistake when Rostovtzeff asserts that the earliest instance of this belongs to the third century, though most instances are of that date (*ibid.* 395, 397, 400, 401-2, 406-9). Cf. the parallel formula in the neighbouring town of Minoa, *ibid.* 240 (δεκάπρωτοι absent from the formula in 239).

⁸ *Ἰέρων Λόγιον*, IV, 71 ff., ed. Keil, p. 443. The governor of Asia selected annually the φύλακα τῆς εἰρήνης for each city from names sent in to him of δέκα ἄνδρων τῶν πρώτων. The particular reference in the section quoted is probably to Hadrianoutherae (Ramsay, *Historical Geography*, 157, 437).

⁹ *BCH* 10 (1886), 410 (C. Julius Celsianus, A.D. 150-180. V. the genealogical table drawn up by Buckler *Rev. de phil.* 37 (1913), 308); *IGR* IV, 1290 = *Denkschr. d. wien. Akad.* LX, iii (1917) no. 15 (Marcus-Commodus. Laevianus, στρατηγός of Thyateira in the time of Commodus, cf. the series of coins recorded by Head, *Cat. of the Greek Coins of Lydia*, p. cxxiii, n. 4; Imhoof-Blumer, *Lydische Stadtmünzen*, p. 153, n. 18); *IGR* IV, 1248 (πανηγυρικῶς ἄντα τῶν μεγάλων Ἀγώνων, probably referring to the games in honour of θεὸς Ἀγώνιστος as in *IGR* IV, 1290, and not the Ἀγώνιστῆς ἱσοπέθια); *JHS* 37 (1917), 108 (ἀγωνοθετήσαντα τοῦ προπάτορος θεοῦ Ἀπολλωνίου [Τυρίμου]), and *IGR* IV, 1273 (ἀγωνοθετήσαντα τῶν μεγάλων Σεβαστῶν [Τυρίμῳ ἀγώνων])—i.e. both later than A.D. 140, and probably third century; *BCH* 10 (1886), 415 ([ἀγωνοθετήσαντα (?) τ]οῦ Σωτήρος Ἀσκληπείου . . . δεκαπρωτεύσαντα . . . καὶ ἀμφιβαλεῖα γενόμενον τῶν μεγάλων Ἀντωνίων) (Ἀντωνίων given by Keil and von Premerstein after revision). Seeck considered these games were in honour of M. Antonius the triumvir, and consequently dated the stone early; Rostovtzeff, *Soc. and Econ. Hist.* VIII, n. 45, supposes they were in honour of Gordian; Keil and von Premerstein, *Bericht über eine zweite Reise in Lydien*, 36, hesitantly propose to identify them with the Ἀγώνιστῆς Πύθια. Both Ἀντώνια (at Athens, *CIA* III, 121, 1122, 1169, 1202; Magnesia ad Sipylum, Head, *op. cit.*, p. lxxii; probably also the Ἀντώνια Γερεῖα Ὀλύμπια at Laodicea ad Lycum, *IGR* IV, 850, cf. *Catal. of the Coins of Phrygia*, p. lxxxi, Ἀντωνίον or εἰς Κομόδεον in year 88 = A.D. 211) and Ἀντωνίεια (as e.g. *IGR* III, 1012, Ἀντωνειανὸν οἰκουμένικόν) occur as adjectival forms describing games in honour of Antonini. The meaning of ἀμφιβαλεῖς is in doubt. It occurs only here, though

begins at the same time.¹ To the early third century belong the inscriptions of M. Sempronius Clemens, who was δεκάπρωτος in Stratonicea in Caria,² and the series from Prusias ad Hyppium.³ The institution is found at this date also across the Aegean at Chalcis,⁴ and even on the mainland at Tegea.⁵ To two other inscriptions of δεκάπρωτοι a date can be assigned: one from Apamea in Phrygia, A.D. 244,⁶ and one from Sicily under Constantine.⁷

Many undated examples fill out the list.⁸ There are instances from Balanaca in Syria;⁹ Iotape in Cilicia;¹⁰ Salamis in Cyprus;¹¹ many cities in Lycia and Pamphylia, viz. Phaselis,¹² Myra,¹³ Cadyanda,¹⁴ Aspendus,¹⁵ Cormus,¹⁶ Aperlae,¹⁷ Pogle,¹⁸ Syllium,¹⁹ Sidyma;²⁰ cities in Asia, viz. Philadelphia,²¹ Smyrna,²² Iasos,²³ Magnesia,²⁴ Aemonia,²⁵ Hierapolis,²⁶ Laodicea

its verbal form is found on another stone from Thyateira, *BCH* 10, 415, n. 24, cf. 11, p. 98, n. 1 (Foucart) ἐνδόξως παλαίοντα καὶ ἀντιβαλέοντα τὰ μέγιστα Ἀσκλημεία. Asclepian games at Thyateira occur on another stone which probably belongs to the third century, *Rev. de phil.* 37, 324. Keil and von Premerstein's suggestion is probably the most satisfactory; the games which Elagabalus reorganized as Αἰγυσιεῖα Πύθια or Ἰσοπύθια εἰσελαστικά might in certain instances be given a name attaching them more closely to the Antoninus who founded them. The games of Elagabalus occur on two stones mentioning δεκάπρωτοι, which are thus later than A.D. 217—*IGR* IV, 1261 and 1265 (of the time of Severus Alexander: Αἰγ. Ἀπρεμαγόρας, mentioned as στρατηγός on a coin, v. Mionnet, *Description des médailles antiques* IV, 995 = Head, *Lydia*, p. cxxv); *Rev. de phil.* 37 (1913), 322, 324 (third century according to the editor). Undated stones: *IGR* IV, 1228, 1250, 1256, 1271; *BCH* 11 (1887), pp. 100, 457, 473. On the games at Thyateira, v. Keil and von Premerstein, *Zusätze Reise*, 32 ff; Buckler, *Rev. de phil.* 37, 310.

¹ *Ath. Mitt.* 8, p. 321, no. 5. M. Aur. Euarestos is probably the son of the Euarestos mentioned as γραμματεὺς of Tralles on coins of Marcus, Verus, and Commodus (Head, *Lydia*, 350 f.); *ibid.* 2929, 2930; *Ath. Mitt.* 8, 328.

² *BCH* 12 (1888), pp. 83 ff., nos. 9–11. His great-grandson was priest under Galerius (Jovius), who died in A.D. 311.

³ *IGR* III, 61, 62 (the dedicator is T. Ulpianus Papianus, belonging to a family which flourished in the late second and early third centuries, cf. *Prosop. Imp. Rom.* III, p. 458, n. 537, 8), 64, 65, 67, 69 (T. Ulpianus Aelianus Papianus), 60 (a man who gave entertainment to Severus and Caracalla).

⁴ *IG* XII, ix, 906. The editor accepts the reading *A* in l. 15, i.e. Α(ουκίου) Νοοτίου Αυσωνίου. For the name in this area cf. *ibid.* 1234 A, l. 5 (Aedeptus) Α. Νοοτίος Ὀντατος. Peparthus has been omitted from the list (*IG* XII, viii, 646): the expansion of Δεκ. in l. 2 (τὸν ἀξιολ. Δεκ. Αὐρ. Διονύσιον) to Δεκ(άπρωτον) does not commend itself.

⁵ *IG* v, ii, 152. Cf. also 153 of the fourth century—πόλλος ἀριστοί.

⁶ Ramsay, *Cities and Bishoprics*, 472.

⁷ *ILS* 8843. His son (*ibid.* 1251) was *consularis Tusciae et Umbriae*, probably c. A.D. 370.

⁸ The ground for dating the inscriptions previously cited is either given by the events recorded, in the names, or mentioned in the footnotes, except in cases of a series: no attempt has been made to obtain a chronology from the letter-forms, an unreliable criterion in dealing with this region and period.

⁹ *IGR* III, 1013.

¹⁰ *IGR* III, 834, c; *CIG* 4415, b; perhaps *ibid.* 4411, a. V. *infra*, p. 14, n. 10.

¹¹ *CIG* 2639.

¹² *IGR* III, 764; *BCH* 16 (1892), 443. Since this manuscript went to press Mr. M. N. Tod kindly called my attention to an inscription mentioning a δεκάπρωτος at Palaia Isauria: Swoboda, Keil and Knoll, *Denkmäler aus Lykaonien, Pamphylien und Isaurien*, p. 75, no. 153.

¹³ Petersen and von Luschke, *Reisen in Lykien* (1889), 38.

¹⁴ *Tituli Asiae Minoris* II, 661 (= *IGR* III, 516), 671.

¹⁵ *IGR* III, 658.

¹⁶ *Ibid.* 804. Dated to the third century by Rostovtzeff, *Soc. & Econ. Hist.*, p. 601, n. 19.

¹⁷ *Ibid.* 693.

¹⁸ *Ibid.* 406.

¹⁹ *Ibid.* 801, 802. Third century according to Rostovtzeff, *loc. cit.*

²⁰ *Ibid.* 590.

²¹ *IGR* IV, 1629, 1640, 1644; *CIG* 3429.

²² *CIG* 3201; *SEG* II, 653 (from the letter-forms the editors suggest late second century).

²³ *Rev. & gr.* 6 (1893), 157.

²⁴ 'Musa Bey', *IGR* IV, 1531. The dialect is apparently Aeolic (? archaizing).

²⁵ *IGR* IV, 657.

²⁶ *Ibid.* 818. I do not know why Rostovtzeff refers this stone to the time of Hadrian.

ad Lycum,¹ perhaps Ilium;² cities in Bithynia, Cius,³ Claudopolis;⁴ and Eretria from across the Aegean.⁵

One of the most important facts that emerged from the discussion of *δεκάπρωτοι* in Egypt was that in that country they acted as taxation officers solely on behalf of the central government. Was this the case in the rest of the Empire? Now the information to be gleaned from inscriptions is neither so detailed nor so varied as that in the papyri. But the *δεκάπρωτοι* certainly took a part in municipal affairs. They would seem originally to have formed a finance committee of the local senate. In this capacity they appear at Palmrya, empowered to act with the *ἀρχοντες* in the codification of the new tariff.⁶ The investment of the capital given to cover the expenses of the Stephanephoria at Iasos was to be entrusted to a controller to serve for five years, chosen from their number.⁷ A similar foundation is discussed by Modestinus: a woman founded a gymnastic contest in her native city on condition that she should retain the capital sum and pay interest to cover expenses, giving a guarantee to the *δεκάπρωτοι*.⁸ In the island of Amorgos, in the towns of Aegiale and Minoa, as also at Chalcis, the standing of the *δεκάπρωτοι* was such that along with the *στρατηγοί* they formed a preliminary committee for the *ecclesia*, and presided over it jointly.⁹

There is not so much evidence to show that they collected revenues for the central government in Rome.¹⁰ The only trustworthy epigraphical indication is the condensed phrase in an inscription from Thyateira¹¹ *δεκαπρωτεύσαντα τὴν βαρυντέραν πρᾶξιν*. *Πρᾶξις* is to be understood as an internal accusative, and the phrase translated 'to act as a *δεκάπρωτος* in regard to the heavier levy', i.e. it was an essential function of a *δεκάπρωτος* to raise levies.¹²

¹ *CIG* 3945.

² The inser. (*IGR* iv, 222) is not intelligible. l. 2 has the curious phrase *δεκάπρωτων* (? = *δεκαπρωτείαν*) τῆς κοινότητος.

³ *CIG* 3732. From the man's name, *Ἀντώνιος Μάρκος Πελλεῖος*, and that of his wife, *Ἀσυνία Ἀσκληπιοδόκη*, Seeck inferred that the pair had received Roman citizenship from M. Antonius the triumvir and C. Asinius Pollio, and dated the stone early. Rostovtzeff rightly discounts this, though the name Asinnia is not so commonly found in the East as he suggests. But such names, being handed down from father to son, cannot be used for dating. In the present case, for example, the son is called *Ἀντώνιος Ἀσίνιος Μάρκος*.

⁴ *Ath. Mitt.* 12, 180. ⁵ *IG* xii, ix, 295. ⁶ G. A. Cooke, *North Semitic Inscriptions*, no. 147, (pp. 313 ff.).

⁷ *Rev. et. gr.* 6 (1893), 157 ff.

⁸ *Digg. L.* 12, 10.

⁹ Cf. p. 12, n. 7—the phrase *γνώμη στρατηγῶν καὶ δεκαπρωτῶν*, ἐχόντων δὲ τὴν πρυτανικὴν ἐξουσίαν. Chalcis, *IG* xii, ix, 906 εἰσηγησαμένων τοῦ δεκαπρωτοῦ Κλ. Ἀμύντου καὶ Οὐδῆσιου Παμφίλου: cf. also l. 14.

¹⁰ Josephus' story (*Vita* 13, 68 ff.; 57, 296) that on a massacre of Greek residents in Tiberias, plunder recovered from the insurgents by Josephus was entrusted to οἱ τῆς βουλῆς πρῶτοι δέκα is indecisive either way.

There might have been the directest of evidence if a stone from Iotape (*CIG* 4411 a) had been preserved intact. It is exhaustively discussed and plausibly restored by Hula, *Jahreshefte* 5 (1902), 203. His version runs:

l. 8. . . . [ἀγορα-]
νομήσαι[τος] ἐκ[τ] ἐνῶ[ς], [δεκαπρωτ]εύσαν-
10. τος πλειστάκις ἐπὶ τῇ[ς] ἀπαγωγῇ τῆς τῶν κυ-
ριακῶν φόρων πιστῶς κ.τ.λ.

In l. 9 any one of *γραμματεῦσαντος*, *ἱερατεῦσαντος*, *ἐπιμελητεῦσαντος*, *ταμειῦσαντος*, etc., might be restored, but would not suit the context. I have not been able to find any parallel of this date for the *ἀπαγωγή* phrase, but *ἀπαγωγή φόρων* in such a sense is used by Herodotus.

¹¹ *IGR* iv, 1290. But see von Premerstein, *Klio* 12 (1912), 165. Fiebigler and Schmidt, *Denkschriften der Wiener Akademie* LX, iii (1917), no. 15. A levy in cash was needed in a hurry to raise funds to repel a raid of Bastarnae.

¹² Seeck (*loc. cit.*, 183-6) went further in drawing inferences from *IGR* iv, 1228, *δεκαπρωτεύσαντα ἐτη ἑ, καὶ ἐπιδόσει καὶ κυριακαῖς ὑπηρεσίαις χρησιμεύσαντα τὴν πατρίδα*. He assumed that the *χρησιμεύσαντα* phrase qualifies *δεκαπρωτεύσαντα*, and explained *ἐπιδόσει* as a 'voluntary gift to make up the tax quota', referring to the use of the terms *κυριακαὶ χρεῖαι* and *κυριακαὶ ὑπηρεσίαι* in Egypt to cover transport requisitions on behalf

Secondly, it has been argued that in Egypt δεκάπρωτοι remained in office for a period of five years. For the rest of the Empire the evidence is conflicting. There is very little to show, as was held by Waddington,¹ that the office was annual, apart from the fact that M. Sempronius Clemens of Stratonicea after being δεκάπρωτος held three priesthoods τῷ ἐξῆς ἐνιαυτῷ.² On the other hand, in some towns the office was apparently held for life.³ But from the frequent use of the aorist or perfect participle to describe the office,⁴ it is to be inferred that its duration was limited as a rule. In a decree honouring Asclepiades of Thyateira, it is stated that he acted as δεκάπρωτος for ten years, δεκαπρ[ω]τεύσαντα ἔτη ι'.⁵ If the aorist participle may be taken to show that ten years was his full term of office, it still remains uncertain whether such a term was normal at Thyateira;⁶ if it was not, did Asclepiades volunteer for extra service, or was he reappointed perforce, as apparently δεκάπρωτοι were in Egypt? If the latter, was it continuous reappointment to an annual office,⁷ or did he serve for perhaps two periods of five years?⁸ These questions do not admit of a certain answer. It seems that there was considerable local variation, and probably even within the same city the practice was not constant.

This regional variation considered together with the pot-pourri of local financial duties, is an indication that the δεκάπρωτοι were originally a spontaneous growth in their cities. A general survey will reinforce this, and show that Rome officially encouraged them for her own purposes after they had already developed on individual lines.

The reforms of Severus in Egypt (at first sight a bold experiment in the direction of

of the imperial government (κυριακαὶ ὑπηρεσίαι, BGU 266, 18; κυριακαὶ χρεῖαι, P. Lond. II, p. 74, n. 328, l. 10). This is supported by E. Stein, *Gesch. des spätrom. Reiches* I, p. 73, n. 1, who stresses the connexion of the δεκάπρωτοι with the pre-Diocletianic annona. But Seeck's assumption seems unreasonable, and in the present writer's opinion is put out of court by the parallel of IGR IV, 818. Here the phrase εἰς χρεῖας κυριακάς εὐχρηστον is widely separated from and cannot qualify δεκαπρωτεύσαντα.

¹ *Voyage archéologique* III, on no. 1176.

² BCH 12 (1888), pp. 82 ff., no. 9, l. 3: μετὰ τὴν ἀρχιερωσύνην καὶ τὴν πρώτην ἱερωσύνην [Διός] Πα[ν]μάρου καὶ τὴν δεκαπρωτείαν, ἱερατευτικῶς τῷ ἐξῆς ἐνιαυτῷ. In decrees honouring him that were passed later in his career, Clemens is again styled δεκάπρωτος, cf. *ibid.*, no. 10, l. 21; no. 11, l. 14 (the noun δεκάπρωτον, where other offices are described by aorist and perfect participles); after his first tenure of the δεκαπρωτεία he held it again, perhaps permanently.

³ IGR III, 1376 (Gerasa), δεκαπρ[ω]τον [διὰ β]ίου πόλεως; IGR III, 764 (Phaselis) εἰκοσαπρωτεύσαν[τα] . . . ἐπ[ὶ] τοῦ τῆς ζωῆς χρόνῳ and BCH 16 (1892), p. 443; (also Phaselis), εἰκοσαπρωτεύσαν[τα] μέχρι τέλους.

At Arneae (IGR III, 640) a man who had been δεκάπρωτος from his eighteenth year (cf. Ulpian, *Digg.* I, 4, 3, 10; δεκάπρωτοι used to be appointed below the age of twenty-five) was εἰκοσαπρωτος at the time of his death. Cf. the memorial of a man of Idebessus (IGR III, 648) εἰκοσαπρωτεύσας ἀπὸ νέας ἡλικίας.

Seeck's argument (*loc. cit.*, 157) that in the inscriptions of Prusias ad Hypium διὰ βίου in phrases such as δεκάπρωτον καὶ κοινόβουλον καὶ πολειτογράφον διὰ βίου applies also to δεκάπρωτον is hardly acceptable. Cf. Hula, *Jahresh.* 5, 205.

⁴ E.g. IGR IV, 1640, ἀναθέντων τὴν τεμὴν Κορί[η]λου Ζηλῶτου, ἀνδρὸς δ[ε] δεκαπρωτευκότος κ.τ.λ. In honorary decrees, if the person honoured had not ceased to act as δεκάπρωτος when the decree was passed, the present participle is to be expected, and it occurs on certain stones, e.g. IGR III, 640, l. 24 (should be εἰκοσαπρωτεύοντα, cf. l. 6); TAM II, 661 = IGR III, 516. In both these inscriptions the other offices are described by aorist participles.

⁵ Seeck (*loc. cit.*, 168) proposes to restore [δεκαπρ]ωτεύσαντα ἔτ[η] ι', or ἔτ[η] εἰ (= 15) in the second line of another inscription from Thyateira (BCH 11 (1887), 473). What held in Thyateira need not have been the norm elsewhere in Asia Minor.

⁷ Hula's restoration of CIG 4411 (a) (cf. p. 14, n. 10) from Iotape, which would contain the phrase δεκαπρωτεύσαντος πλειστάκις, might be cited in support of this.

⁸ The fact that the ἐπιμελητής chosen from the δεκάπρωτοι of Iasos is to serve for five years suggests that this might have been the period for which the δεκάπρωτοι themselves served.

administrative decentralization in a land of traditional centralization) were intended to increase the circle of those who could be forced into the service of Rome, and to double the number of persons responsible to the government for their official activities. These persons were themselves liable to render an account of their administration; and should they fail, or be forced into flight, the senates which elected them automatically undertook the liability. The effect was to create a situation resembling that depicted in the legal sources. The contrast between the data from Egypt and those from the rest of the Empire (allowing for peculiar conditions in Egypt) is particularly that between created uniformity and spontaneous development. Now it is almost certain that the introduction of *δεκάπρωτοι* was based on existing practice in the Empire:¹ when certain nomes had more than ten *δεκάπρωτοι* the name had lost its original significance and taken on a new technical sense. If this reasoning is sound, it gives the line for a general survey.² In the provinces in which, during the Republic and early Empire, companies of *publicani* had enjoyed the privilege of collecting *tributa*, it had been their practice to make a *pactio* with each city for the amount to be raised.³ When this privilege was taken from them, probably under the Julian emperors at the latest,⁴ and in the provinces where they had never enjoyed it, the same method was employed by the Roman government, and direct arrangements were made with individual cities. Originally, in all probability, contracts were arranged with the magistrates of the municipalities for the collection of certain taxes and the sums were fixed.⁵ In some cases the city would send a delegation to the capital city of the province, just as Josephus represents the *πρώτοι καὶ ἄρχοντες* in Ptolemy's time resorting to Alexandria to buy the tax contract of their city.⁶ Such a delegation would number ten as a rule, to judge by Josephus' vague statements, and would have some such non-committal designation as *οἱ πρώτοι δέκα*, in time condensed to *δεκάπρωτοι*. The title conveys nothing as to the composition of the delegation, which might consist of magistrates or members of senatorial committees indifferently. This mode of procedure was probably acceptable to the imperial government and encouraged by it. *Ad hoc* committees or groups of magistrates hardened into a definite semi-official body, whose responsibilities entitled them to be regarded as magistrates.⁷ Traces of this fostering are perhaps to be seen in the change from *δεκάπρωτοι* to *εἰκοσάπρωτοι* in the cities of Lycia and Pamphylia in the time of Hadrian.⁸ A change of this nature would have the effect of reducing the burden on individuals; and it is well known that Hadrian took measures to relieve the strain imposed by fiscal requirements,⁹ and also interested himself in the growing problem

¹ Cf. Jouguet, *Vie municipale*, 390.

² This section is indebted to Seeck, *op. cit.*, 172 ff. See in particular his discussion of the passage of Arcadius Charisius, *Digg. L.*, 4, 18, 26: *Mixta munera decaprotiae et icosaprotiae, ut Herennius Modestinus et notando et disputando bene et optima ratione decrevit: nam decaproti et icosaproti tributa exigentes et corporale ministerium gerunt et pro omnibus* (Seeck, *nominibus*) *defunctorum fiscalia detrimenta resarciunt.*

³ Cic. *ad Q. fr.* I, 1, 12, 35; *ad Att.* v, 13, 1; vi, 1, 16; *ad Fam.* XIII, 65; *de Prov. cons.* 10. Rostovtzeff, *Staatspacht*, 357. For the *pactiones* of *decumani* and *aratores* in republican Sicily, see Carcopino, *La loi d'Héron*, 12 ff., 33 ff.

⁴ Rostovtzeff, *ibid.*, 379; Hirschfeld, *Kaiserl. Verwaltungsbeamten*, 69.

⁵ Hirschfeld, *ibid.*, p. 74, n. 6. Apuleius, *apol.* c. 101: *Praesens est quaestor publicus cui depensum est.* Hirschfeld finally agrees with Mommsen that the quaestor here is a local magistrate.

⁶ *Antiq.* XII, 169. Doubtless *bien trouvé*, even if a fiction.

⁷ It is impossible to say with any certainty whether the *δεκάπρωτοι* became important to Rome because they were already local administrative officers, or whether their municipal importance derived from their communications with the government.

⁸ F. Hula, *op. cit.* In Lycia and Pamphylia: Idebessus, Arneae, (*δεκάπρωτοι* and *εἰκοσάπρωτοι*), Cadyanda, Phaselis, Myra; in Asia at Iasos—*τῶν δεκάπρωτων ἢ εἰκοσάπρωτων ἢ τῶν τούτοις ὁμοίων.*

⁹ E.g. especially *Digg. XLIX*, 14, 3, 6 (Callistratus): *Valde inhumanus mos est iste, quo retinentur conductores vectigalium publicorum et agrorum, si tantidem locari non possint.*

of *munera*.¹ The development of the liturgical system² and the extension of the δεκάπρωτοι goes on continuously throughout the second century; towards its end the type has become fixed,³ and Rome officially adopts it, in Egypt and elsewhere. Though the chronology of the inscriptions is insecure, one cannot fail to recognize their great increase in frequency at the end of the second century and the beginning of the third, or to see that the δεκάπρωτοι are now important personages.⁴

In this development the correspondence between the central exchequer in Rome and the local senates has played a leading part. If the senates chose to treat with Rome by means of a committee, as its electors they were held responsible for the integrity of that committee. For this reason the controversy as to whether δεκάπρωτοι were themselves senators or not is unimportant.⁵ Rome was interested only to the extent of requiring an adequate guarantee. One would like to know, however, whether the δεκάπρωτοι in Asia had any connexion with that enigmatic body, the γερονσία. The only evidence available suggests that they had none: a public-spirited citizen of Acmonia received honours from the γερονσία for introducing examination of weights and measures in the market-place, while for performing the office of δεκάπρωτος the honours came from the βουλή and δῆμος.⁶

The relation between δεκάπρωτοι and *decemprini* remains to be considered. Now the *decemprini*⁷ who appear in Italian and Sicilian cities of the time of the Republic are the

¹ Digg. L, 4, 14, 6 (Callistratus): *Divus etiam Hadrianus de iterandis muneribus rescripsit in haec verba: illud consentio, ut si alii non erunt idonei qui hoc munere fungantur, ex his qui iam fidei sunt, creentur*; L, 4, 18, 30 (Vespasian and Hadrian allow remissions from the *munus hospitii recipiendi*); XXXVI 1, 76, 1 (Hadrian fixes age limits *quantum ad munera municipalia*).

² By such rescripts as those recorded in Digg. L, 1, 11 (Papinian): *Imperator Titus Antoninus Lentulo Vero rescripsit magistratum officium individuum ac periculum esse commune*.

³ δεκαπρωτεύοντα κ.τ.λ. in the inscription from Thyateira. By the jurists the *decaprotia* is classed as *munus patrimonii* (Ulpian, Digg. L, 4, 3, 10) or *munus mixtum* (Arcadius Charisius, *ibid.* 18, 26).

⁴ IG v, ii, 152 τὸν ἀξιολογώτατον δεκάπρωτον (Tegea, third century); Ramsay, *Cities and Bishoprics*, 472, three brothers set up a memorial to their father βουλευτῇ καὶ δεκάπρωτῳ (Apamea, A.D. 244); *Ath. Mitt.* 12, 180 ὁ ἀξιολογώτατος δεκάπρωτος ζήσας ἐτη . . . (Claudiopolis, date undetermined, though the editors suggest third century); ILS 8843 τῶν διασημοτάτων δεκαπρωτῶν (Sicily, fourth century); IGR III, 406, ἀνδρα γένους ἀρχιερατικοῦ καὶ δεκαπρωτικοῦ (Pogla, date undetermined). Cf. the *πρωτανική ἐξουσία* of δεκάπρωτοι in Amorgos, *supra* p. 14, n. 9.

⁵ The passage from Digg. L, 1, 17, 7 (Papinian): *exigendi tributii munus inter sordida munera non habetur et ideo decurionibus quoque mandatur*, by which Menadier originally sought to show that δεκάπρωτοι were not necessarily senators, is not final. Nor can data from Egypt be used. V. Wilcken, *Grundz.*, 217-18, and add BGU 1611: here both δεκάπρωτοι, though senators, do not so sign themselves in their receipts. One has to halt longer over the presence of women as δεκάπρωτοι in Syllium (IGR III, 801, 2), and perhaps also in Egypt in the Fayyūm (δεκαπρότη in P. Fior. 76, ll. 11, 20, 54). A δεκάπρωτος of Eretria (IG XII, ix, 295) apparently wished to emphasize his connexion with the senate, I. 2 τοῦ συνεδρίου δεκάπρωτος ἀνὴρ.

⁶ IGR IV, 657. At Aphrodisias there is mention of a curious body known as the *διακοσιάπρωτοι*, *Rev. ét. gr.* (1906), 242, col. 1, l. 20. Money had been left to build a banqueting hall to be used by [τ]ῇ τε βουλῇ καὶ τοῖς διακοσιάπρωτοις καὶ τῇ γερονσίᾳ καὶ τοῖς λιπυτοῖς πολέταις [κατὰ φύ]λεις. Reinach supposes they represented the 'two hundred highest-taxed men in the city'.

⁷ Irrelevant to the present thesis are the *decemprini* appearing in Rome in CIL VI, 1869, 1870 (*decuriae* of *apparitores*); VI, 2010 (priests of the *domus Augusta*); VI, 86 (priests of Mithras); VI, 2137 (*sacerdotes sacrae urbis*); and at Lambaesis, CIL VIII, 2564, a list of soldiers, coupled with the names of four of whom are the letters DXPRIMPP (= according to Renier, d(implarius) X prim(us) p(rinci)p(alium)). Similarly irrelevant are the *decemviri*: CIL II, 1953 and 5048, instances of a native magistracy in Spain surviving at Cartima and Ostippo, *civitates liberae*, till the time of Vespasian; CIL X, 5849, XI, 3119, 3121, 6056, 6061 a, 6065, title of a regular municipal magistrate in certain Italian towns; CIL III, 3467 and VIII, 10945 (interpretation uncertain).

first ten men in the *ordo decurionum*, advising the ordinary magistrates¹ and representing the *curia*, in delegations, for example. This is the sense to be attached to the term in Cic. *ad Att.* x, 13, 1, *pro Roscio Amer.* 25 (Ameria), *Verr.* II, 67, 162 (Centuripa), and *CIL* XI, 1420 = *ILS* 139 (Pisa). It is possible that the same interpretation should be given to *decemprimi* occurring in three inscriptions: *CIL* x, 7236 (Lilybaeum), 7211 (Mazara, Sicily; too mutilated to be of use), and 8192 = *ILS* 6336 (*principali col. Mis. ex XP*). For Lilybaeum became a *municipium* of Roman citizens under Augustus, Misenum a colony under Claudius, and one might expect their constitutions to embody a traditional institution. But these stones are probably of at least third-century date, and it is more likely that the *decemprimi* they mention are the same as those who undertook the *munus decemprimatus* alluded to by Hermogenian, *Digg.* I, 4, 1, 1. This is, I believe, the only place in the *Digest* where the Latin term *decemprimi* is used; the Greek *decaproti*, *decaprotia* are the usual expressions. But the Latin here is perhaps not a mere translation referring to the *δεκάπρωτοι*. For the appearance of *decemprimi*, always qualified as *curiales*, in the Theodosian Code,² suggests that the *δεκάπρωτοι* under the name of *decemprimi*, had obtained a *pied à terre* in the West. Declareuil³ indeed declared that the *decemprimi curiales* had no connexion whatever with the *δεκάπρωτοι* of the second and third centuries. There is certainly no evidence for the existence of *δεκάπρωτοι* after the first half of the fourth century;⁴ and after the reforms of Diocletian and Constantine one would expect to find some uniformity in the financial system of the empire. But if there were *decemprimi* in the western Empire in the third century analogous to the *δεκάπρωτοι* it would probably be correct to say that by the time of the Theodosian Code the *decuriones* had begun to do as *susceptores* and *exactores* what they had formerly done as *decemprimi*. If this reasoning is sound, the *decemprimi curiales* are a relic: they are the most important members of the *curia*, without special duties, but having a greater degree of responsibility, perhaps, than the ordinary *decuriones*—a responsibility with corresponding privileges. This conclusion is confirmed by a parallelism of expression noted by Seeck, following Gothofredus, in *CT* XVI, 5, 52, pr. and 5, 54, 4; XII, 1, 85 and IX, 35, 2. In the

¹ There are several instances of a similar phenomenon elsewhere in the Empire, mainly in communities lower down the administrative scale. The variety of names and marked regional characteristics show the instances to be local only. In Gaul at Nemausus the *IIIIviri* were assisted by *XIviri* (*CIL* XII, 3179 = *ILS* 2267); at Vasio the *praefectus pagi* by *vigintiviri* (*CIL* XII, 1376); Hirschfeld claims these, though without clear evidence, as relics of national Celtic institutions (*Kleine Schriften*, 78). Massilia, as is well known, had in Republican times a committee of the council composed of fifteen members (*Caesar BC* I, 35). At Aix, *decemlecti* probably formed a similar committee to the *possessores* of the *vici*, v. *Rev. ét. anc.* 36 (1934), 199 ff., where Willeumier restores *decemlecti* in an unpublished inscription, and *CIL* XII, 2461. In Italy a stone from Larinum records that a *magister pagi* (place unknown) acted *de del(e)ctorum s(ententia)*, *CIL* IX, 726 (with Mommsen's expansions). In Africa, in certain towns of markedly indigenous origin, a kind of council termed *undecimprimi* apparently shaped business for discussion by the elders (Broughton, *Romanisation of Africa Proconsularis*, p. 181, and evidence n. 4). Villages in the East long continued to have their body of ten elders or headmen: a constitution of Leo and Anthemius, addressed to the *praefectus praetorio Orientis* (A.D. 468), directs that villagers attempting to enter under patronage be haled back, fined, and flogged *μετὰ τῶν δέκα προτενόντων τῆς κώμης* (*C.J.* XI, 54, 2).

² *CT* IX, 35, 2 (A.D. 376; written from Trèves, and addressed *praef. praetorio Galliarum*); XVI, 5, 54, 4 (A.D. 414; penalties for adherence to the Donatist heresy, addressed to the *proconsul Africae*). Cf. XVI, 2, 39.

³ *Nouv. Rev. hist. dr.* 31 (1907), 622 ff.

⁴ It has already been shown that *δεκάπρωτοι* disappear from Egypt c. A.D. 302. The latest inscriptional evidence is *ILS* 8843 (Sicily under Constantine). At the same time Arcadius Charisius was discussing the functions of *decaproti* and *icosaproti*, *Digg.* I, 4, 18, 26. They occur once in the *Codex Justinianus* (x, 42, 8); but this rescript, issued by Diocletian and Maximian, was probably retained in Justinian's Code because it also dealt with the *protostasia*.

first of each pair the term *principales* is used, in the second *decemprimi curiales*, in almost identical contexts. The term *decemprimi* has now lost its technical significance.

It seems probable, then, that there is truth in the usual view; the West had its *decemprimi*, forming a counterpart to the *δεκάπρωτοι* and not improbably based on them. But the sources have little to say of these *decemprimi*; in only two or three cases can a 'local habitation' be assigned to them, and it would be wrong to postulate for them in the western Empire that universality which belonged in the eastern to *δεκάπρωτοι*. It may be, as Declareuil suggested,¹ that in western epigraphy *munera* are rarely mentioned. But the scantiness of evidence suggests a difference of administrative procedure, namely that, as a rule, in the west financial responsibility rested with the ordinary municipal magistrates and the whole body of *decuriones*; and that perhaps not till the chaos of the third century did the Roman government borrow from the East and enforce the consequences of that responsibility particularly against the first ten men in the *curia*.

Finally, this inquiry shows that as far as *δεκάπρωτοι* are concerned, the hypothesis put forward for examination at the outset is incorrect. Not merely were *δεκάπρωτοι* intruders into Egypt, but they were the product of a system organized independently in the Empire, a system that was developing apparently as early as the reign of Hadrian. Further, this system differed considerably from that of Egypt: the allocation of liturgies and responsibility for them depended on the senate of a *πόλις*, not on bureaucratic selection. The examination of one institution cannot, of course, disprove the hypothesis. But it can and does indicate that current views of the administrative relation between Egypt and the Empire need to be subjected to further scrutiny.

¹ *Loc. cit.*, 624.

THE ACCESSION OF PTOLEMY EPIPHANES: A PROBLEM IN CHRONOLOGY

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Writing in 1930,¹ Holleaux had to admit that 'the true date of Philopator's death remains a mystery'; one reason why this is still true to-day is that hitherto no historian has taken into account the evidence of the demotic papyri in considering this problem. Since, in his *Archons of Athens in the Hellenistic Age* (1931),² Dinsmoor has now furnished new calculations, it seems worth while to reconsider the whole of the evidence, both demotic³ and Greek, and to attempt a solution of this ancient crux.

Such evidence as we have is not consistent. According to the Canon of the Kings, contained in Ptolemaios' *Almagest*, Philopator died in the year 544 of the era of Nabonassar of Babylon (reckoned from February 27, 747). Making the necessary adjustment to the Julian calendar, we find that this is the year October 13, 205–October 12, 204. Actually the Canon gives this as the first year of Epiphanes' reign. But it is the custom of the compiler to ignore fractions of a year at the end of a reign; thus a king's first year was that in which he came to the throne, his last was his last full year.⁴ If, then, the Canon is reliable, Epiphanes ascended the throne some time during the year October 13, 205–October 12, 204; and this date is confirmed by the evidence of the Rosetta Stone,⁵ a decree dated Xandikos 4 (Macedonian) = Mecheir 18 (Egyptian) of Epiphanes' ninth year, a date which has universally been equated with March 27 (Julian).⁶ This decree was enacted to commemorate the Anacleteria, or Coming of Age ceremony, of Epiphanes, which had taken place most probably⁷ on the previous Phaophi 17, which was the anniversary of the date ἐν ᾗ παρέλαβεν τὴν βασιλείαν παρὰ τοῦ πατρὸς (v. 47), and is to be equated with November 26 for the year of the Anacleteria, whether this was in fact in 197 or 196.⁸ Actually this date is not legible upon

¹ In *CAH* viii, 149, n. 1.

² Appendix G, 471 ff.

³ I would take this opportunity of expressing my very warmest thanks to Mr. T. C. Skeat, of the British Museum, who has given me invaluable help in the collecting of this evidence.

⁴ See Beloch, *Gr. Gesch.* iv, 2, 166; Kubitschek, *Grundriss der antiken Zeitrechnung*, 61.

⁵ *OGIS*, 90; translated by Bevan, *Hist. of Egypt under the Ptol. Dynasty*, 263 ff.

⁶ Except by Holleaux, *CAH* viii, 188, who makes it March 28.

⁷ This is the generally accepted view (*cf.* Holleaux, *loc. cit.*); it is based on the position of the description of the Anacleteria in Polybios (xviii, 55; see below, p. 21), and also on the fact that the Rosetta inscription refers to the crowning of Epiphanes as an event occurring some time previously.

⁸ See Dinsmoor, *op. cit.*, 479; De Sanctis, *Storia dei Romani* iv, 1, 128, puts it on November 28, forgetting that the Egyptian calendar gained one day on the Julian in every four years. Ernst Meyer, *Untersuchungen zur Chronologie der ersten Ptolemäer auf Grund der Papyri* (II. Beiheft zum *Arch. Pap.* 1925), 39 ff., has a theory that the anniversary of Epiphanes' accession (for like most scholars he refers Phaophi 17 to this event) was celebrated in both the Egyptian and Macedonian calendars, in the former by the priests, in the latter nationally. According to him, Epiphanes ascended the throne on Phaophi 17, 203, which was the end of Dystros by the Macedonian calendar; owing to the divergence between the two calendars, the end of Dystros had, by 197 or 196, become equivalent to the second week in Mecheir. Therefore the national anniversary, with the Anacleteria, was a few days before Mecheir 18 = Xandikos 4, when the actual decree was enacted; the priests would celebrate it as usual on Phaophi 17. But Dinsmoor, *op. cit.*, 488, demonstrates that Epiphanes, and probably Philopator, both reckoned their accession by the Egyptian date, and this is the natural inference from the mention of Phaophi 17, without any Macedonian equivalent, on the Damanhūr

the Rosetta Stone, but is confirmed by a hieroglyphic inscription of fourteen years later, the Damanhūr Stele, set up to celebrate a *sed*-festival, or repetition of the Anacleteria ceremony, in Epiphanes' twenty-third year.¹ The year in which the Anacleteria took place, and that in which the Rosetta Decree was enacted have been much disputed, but this problem now appears to have been solved by Dinsmoor, who shows (*op. cit.*, 492) that at the end of the third and beginning of the second centuries the Macedonian calendar in Egypt still approximated closely to the Attic lunar calendar. In 196 there was a new moon on March 22, and if the Rosetta Decree was enacted in that year, Xandikos 1 fell upon March 24. In neither 197 nor 195 does a new moon occur at anything approaching this date. It can therefore be taken as certain that the Anacleteria of Epiphanes was towards the end of 197, probably on November 26, and that it was commemorated by the Rosetta inscription of March 27, 196. True, this deduction appears to ignore an important piece of evidence from the Tebtunis papyri,² a synchronism from Year 4 of Epiphanes, in which the Macedonian and Egyptian calendars already seem to be equated on the basis of Thoth 1 = Dystros 1. But the only safe deduction from this papyrus is³ that for the years 4 to 9 of Epiphanes, both a revised and a normal Macedonian calendar were in existence. Where, as in the Rosetta inscription, the latter is employed, there seems no reason to doubt that it was still running true to the moon. Dinsmoor's claim thus appears to be justified; and it is clear that an Anacleteria in 197, early in Epiphanes' ninth year,⁴ implies that his first year was reckoned as 205-204. Indeed, if one is prepared to follow the majority of historians in regarding Phaophi 17 as the date of Epiphanes' accession, this event can be narrowed down to November 28, 205; how far this identification is justified will be considered later.

In favour of this dating is the fact that the Anacleteria is described in Book XVIII of Polybios,⁵ a book which gives the events of Olympiad 145, 4, i.e. 197-196. De Sanctis,⁶ and Holleaux,⁷ who oppose the dating to suit their own theories of the accession, place the Anacleteria in November 196, and the enactment of the Rosetta Decree in March 195, and consequently have to assume that Polybios extended this book to include events as late as the November following the summer in which the Olympiad year actually finished. Admittedly, Polybios' Olympiad year was not rigid; De Sanctis has rightly shown⁸ that it normally ended with the campaigning season, and could be extended to include events even later than that when they were closely connected with other events inside the Olympiad. But the Anacleteria is related in Polybios in connexion with the revolt of Scopas, which is itself in September or October,⁹ and so is outside those limits. And in any case the evidence of the full moon is against this view.

Additional support for 205 as the date of Epiphanes' accession comes from the evidence

stele. Furthermore, the Rosetta decree itself suggests a greater period of time between the Anacleteria and the enactment of the decree than Meyer allows. This theory is therefore to be rejected. (*Cf. Beloch, op. cit.* iv, 2, 176.)

¹ *Cf. Bevan, op. cit.*, p. 267, n. 2.

² P. Tebt. III, 1, 820. *μηνὸς Αἰθιοπίας Αἰγυπτίων δὲ Ἐπειφῆ [πε]ντεκαίδεκάτης.*

³ *Cf. Grenfell and Hunt, Hibeh Papyri*, p. 348.

⁴ The text of the Rosetta Decree refers to a remission of taxes up to and including the eighth year (*ἕως τοῦ ὀγδόου ἔτους*—L. 29), made in connexion with the Anacleteria ceremony at Memphis.

⁵ Pol. XVIII, 55.

⁶ *Op. cit.* iv, 1, 128, n. 41.

⁷ *Rev. ét. anc.* 15 (1913), 9, n. 3; *CAH* VIII, 149, n. 2; 188.

⁸ *Op. cit.* III, 1, 219 ff. *Cronologia polibiana.*

⁹ Holleaux, *Rev. ét. anc.* 15 (1913), p. 9, n. 3. Holleaux's assumption, however, that the rumour of Epiphanes' death, which broke up the conference of Lysimacheia in 196 (Livy, XXXIII, 41, 1), is to be connected with the revolt of Scopas, is quite arbitrary and unsupported by any evidence; Scullard, *History of the Roman World from 753 to 146*, 271, adopts the same view.

relating to his birth. From the Rosetta Decree it is known that Epiphanes was born on Mesore 30, but no indication of the year is given. There is, however, evidence from a papyrus¹ that Philopator, following the custom of earlier Ptolemies, had elevated his infant son to a share in the throne by Pharmouthi 25 of 'the year thirteen'. Unfortunately it is not known what kind of year is referred to, but in view of the fact that an Egyptian month is mentioned, it is probably safe to rule out the Macedonian calendar. Now the three possibilities² on the basis of the Egyptian year are:

- (a) 13th fiscal year, beginning Meecheir 1, i.e. March 14, 210.
- (b) 13th Egyptian year, beginning Thoth 1, i.e. October 15, 210.
- (c) 13th regnal year, beginning unknown; perhaps September, 210.³

In relation to these three datings Pharmouthi 25 would give us (a) June 6, 210, (b) June 6, 209, (c) probably June 6, 209; the year may be 210, but not, in view of the date when the fiscal year begins, 208. Thus we may assume that Epiphanes was born before June 209; the 30th of Mesore previous to this works out as October 9, 210,⁴ and we may provisionally accept this as the date of Epiphanes' birth.

Now Justinus has a statement⁵ that Philopator died leaving a son five years old; according to Hieronymus⁶ the son was only four. From Epiphanes' birth on October 9, 210, to a (provisionally accepted) accession on November 28, 205, is nearly five years two months, a figure which fits Justinus, but is hard to reconcile with Hieronymus; however, Hieronymus is notoriously unreliable, and this very passage contains further chronological inconsistencies. For Hieronymus states that Antiochos *filiam suam Cleopatram per Euclen Rhodium septimo anno regni adulescentis despondit Ptolomaeo, et tertiodécimo anno tradidit*. Leuze⁷ has pointed out that from Livy,⁸ who is here following Polybios, we know that this marriage did in fact take place in the winter of 194-193,⁹ which is only the eleventh year of Epiphanes' reign, reckoning from autumn 205, the outside limit. Similarly the evidence is against the statement that the betrothal to Cleopatra was in the seventh year.¹⁰ Polybios,¹¹ and Livy following him,¹² both give the reply of Antiochos to the Roman envoys at Lysimacheia in 196; in this reply τὰ δὲ πρὸς Πτολεμαῖον αὐτὸς ἔφη διεξάξειν εὐδοκουμένως ἐκείνῳ· κρίνειν γὰρ οὐ φιλίαν μόνον, ἀλλὰ καὶ μετὰ τῆς φιλίας ἀναγκαιότητα συντίθεσθαι πρὸς αὐτόν. This suggestion of a betrothal in autumn-winter 196 receives apparent support in the statement in the *Chronicon*

¹ Smyly, P. Gurob 12; cf. *Archiv.* VII, 71. It may be observed that there is no evidence for Gauthier's improbable suggestion (*Le Livre des Rois d'Égypte* IV, 267) that Philopator actually abdicated his authority in favour of his infant son, and that this abdication led to the revolt in Upper Egypt.

² I have taken these calculations from Dinsmoor, *op. cit.*, 479.

³ Dinsmoor, *op. cit.*, 488; for our present purpose it is sufficient to observe that the regnal year is unlikely to have begun more than twelve months after the fiscal year. In any case the Egyptian year is probably indicated: certainly by the third year of Epiphanes the Egyptian year, beginning with Thoth 1, was being employed even by Greek officials; cf. P. Petr. III, 57b, where Thoth of Year 4 comes almost immediately after Epeiph of Year 3.

⁴ This is contrary to the views of Bevan, *op. cit.*, 236, and Letronne, *OGIS*, 90, who make the year 209, and the day October 8 and 9 respectively.

⁵ Just. XXX, 2, 6.

⁶ Hier. in *Daniel*. XI, 13-14.

⁷ *Hermes* 58 (1923), 221-9.

⁸ Livy, XXXV, 13, 4.

⁹ Incorrectly given as 193-192 by Niese, *Gesch. der gr. und mak. Staaten* II, 674.

¹⁰ This date is a source of great confusion in both Bevan and Niese. Bevan places it in 196-195 (*op. cit.*, 269), which implies an accession in 202; whereas earlier he gives this as 203 (*op. cit.*, 250). Niese (*op. cit.*, II, 639) puts the betrothal in 199-198, which means an accession in 205; but he, too, gives this elsewhere (*op. cit.*, II, 573) as taking place in 203.

¹¹ Pol. XVIII, 51, 10.

¹² Livy, XXXIII, 40. Livy's translation is *id agere ut brevi etiam adfinitas iungatur*. The word *brevi* is merely inserted for rhetorical effect in Livy's usual manner, and is not to be pressed too closely. See Witte, *Rh. Mus.* 65 (1910), 276 ff.

Paschale that it took place during the consulship of Purpurio and Marcellus, i.e. 196;¹ but this support is in fact illusory, for, as Leuze demonstrates,² the *Chronicon* is based on a series of faulty synchronisms between Egyptian royal years, Olympiads and Roman consul-years, and is thus quite worthless. Hieronymus must therefore stand alone; and at first sight his *septimo anno*, with its implication of an accession in 203, appears to be an obvious error. However, in view of the fact that there is other strong evidence pointing to 203, it may be observed that Bevan regards this particular passage as trustworthy,³ because of the reference to Eucles of Rhodes: 'Jerome seems to have some substantial source behind him, since he states that the Seleucid envoy was a certain Eucles of Rhodes'. The statement is certainly consistent with the well-known Seleucid habit of employing Rhodians,⁴ and it may go back to a Rhodian source, such as Zeno or Antisthenes;⁵ on the other hand Leuze makes out a good case⁶ for believing that Hieronymus took his dates from Eusebios, and if this is so they merit scarcely any confidence whatever.

Of equal importance with the evidence relating to Epiphanes' birth is that which deals with his death. A number of documents have now been discovered which are dated to the twenty-fifth year of Epiphanes;⁷ and since it is known that Epiphanes died in the year 181–180⁸—probably in or shortly after May 180—it is easily calculated that by this date Epiphanes was regarded as having come to the throne before Thoth 1 (= October 13) 204.⁹ A series of documents with synchronisms between the years of the sacred bull Apis and the years of Epiphanes and Philometor¹⁰ serves further to show that the same dating existed in the fourteenth year of Epiphanes; and, as we saw, it was confirmed for the ninth year by the Rosetta Stone. Demotic papyri, with protocols giving the full details of the eponymous priests, exist for the years 2, 3, 5, 7, and 8 of Epiphanes,¹¹ and the fourth year is covered by

¹ Livy, xxxiii, 24.

² *Op. cit.*, p. 222, n. 1.

³ *Op. cit.*, p. 269, n. 3.

⁴ For example, the Hagesandros referred to in certain Cretan inscriptions as working on behalf of Teos as Antiochos' agent; cf. Holleaux, *Klio* 13 (1913), p. 148, n. 3, who also quotes the case of the Rhodian Menelaos, son of Menekrates, referred to as a *φίλος τοῦ βασιλέως Ἀντιόχου* in an inscription of Calymna (*OGIS*, 243).

⁵ Cf. *Pol.* xvi, 14 ff.

⁶ *Op. cit.*, 224 ff.

⁷ E.g. Tait, *Greek Ostraca*, Bodl. 96, dated Pharmouthi 16 = May 20; Mond and Myers, *The Bucheum* II, Inscriptions, no. 8, dated Pharmouthi 8 = May 12.

⁸ *Pol.* xxiv, 6; Diod. xxix, 29; cf. Niese, *op. cit.* III, 91; Bevan, *CAH* VIII, 496.

⁹ It is certain that by 181 all documents, Greek and demotic, were dated by the Egyptian calendar, according to which a king's first year was reckoned from his accession to the fifth epagomenal day following it, and his second and succeeding years from Thoth 1. The Macedonian months were now equated with the Egyptian (see above, p. 21, n. 2).

¹⁰ See Brugsch, *ZÄS* 22 (1884), 126 ff.; Gauthier, *op. cit.* IV, 278 ff. Apis 'born of the cow Ta-Amon' was in its twentieth year in Year 14–15 of Epiphanes; it died in its twenty-fourth year, and was followed by Apis 'born of the cow Ta-Ranen', the first year of which = Epiphanes 19–20. Epiphanes' last year 24–5 thus corresponds to Year 6 of Apis (born of Ta-Ranen), and Philometor 1 = Apis (born of Ta-Ranen) 6–7; this is confirmed by the synchronism Philometor 8 = Year 13 of the same Apis.

¹¹ Year 2: *P. dem. Leyden* 373 (Hathur), *P. dem. Cairo* 30753 (Hathur), *P. dem. Cairo* 30700 (Phamenoth), *P. dem. Cairo* 30697 + 30780 (Pauni).

Year 3: *P. dem. Cairo* 30689 + 30781 + 30782 (Hathur), *P. Berlin* (Greek) 11768 (*Ἀπρεμῖος*), *P. dem. Cairo* 30659 (Mecheir).

Year 5: *New York Hist. Soc.* 373 (Phaophi).

Year 7: *P. dem. Louvre* 2435 (Hathur), *Dublin Tr. Coll. P. Hincks* 2, A.B (Tubi).

Year 8: *P. dem. Louvre* 2408 (Pharmouthi).

This evidence will be found in *PW.* art. *Hiereis* (Plaumann); Gauthier, *op. cit.* IV, 275 ff.; Thompson's supplement to Plaumann's list in *Griffith Studies*, 16 ff.; Sethe and Patsch, *Demotische Urkunden zum äg. Bürgerrechtsrechte* (*Abh. Sächs. Ges. Wiss., Phil.-Hist. Klasse*, vol. 32); Spiegelberg's edition of the Cairo demotic papyri.

two Greek papyri already referred to;¹ further, it is highly probable that certain mutilated documents in the Cairo collection referred to Year 1 of Epiphanes, though none actually survives with that date legible.² Thus a series of documents covering the whole reign of Epiphanes, with the exception of Year 6, appears to support the theory of an accession in the course of the year 205-204.

There is, however, one significant exception. A demotic inscription in Berlin, published by Stern in 1884,³ gives the details of the life of a priest named Khathap, who was born in Year 11, Phamenoth 14 of one Ptolemy, and died in Year 2, Tybi 4 of another, aged 69 years, 9 months, 20 days. Stern shows that the Ptolemies in question can only be Philadelphos and Epiphanes respectively; but his calculations may no longer be considered valid, since he regarded Philadelphos as dying in his thirty-eighth year, whereas in fact he lived until Choiak of his thirty-ninth.⁴ Now it is known from a Bucheum inscription⁵ that as late as Philadelphos' thirteenth year his reign was being reckoned from Soter's death, though later it was ante-dated to his association on the throne with Soter. Hence Thoth 1 of Year 12 is probably October 30, 272 (not 274); and sixty-nine complete years from this brings us to Thoth 1, 203 (October 13), which should therefore be the first day of Epiphanes' second year. If the inscription is reckoning Philadelphos' years from his co-regency, one obtains the impossible result that Epiphanes' second year began on October 13, 205; the date from Soter's death is thus plainly preferable. But even so, it does violence to the tradition of an accession in 205-204, which is apparently supported by the rest of the archaeological evidence.

It may be convenient at this point to deal with the evidence of Eusebios's Chronicle; for an oversight of this co-regency of Soter and Philadelphos has caused a permanent error in his dates.⁶ According to Eusebios, Epiphanes' accession was in 203-202 (translation of Hieronymus) or 202-201 (Armenian version). The Armenian version is normally the less reliable,⁷ but neither is evidence fit to base an argument upon. For our present purpose Eusebios is better ignored.

The main obstacle to placing Epiphanes' accession in November 205 is Polybios xv, 25 ff. This passage, consisting largely of a fragment found in the Escorial, but also supported by other fragments from the Excerptae Valerianae and the Codex Urbinas, gives a detailed account of the accession of Epiphanes, and of the regency and downfall of Agathocles. Its position in Book xv has never been seriously challenged,⁸ and since the book retails the events of Olympiad 144, 2, it would follow that the accession is to be dated 203-202. It should be observed that in the previous book Polybios had given an account of Egyptian events stretching over a long period (ἐκ πλείονος χρόνου πεποιημένα τὴν ἐξήγησιν),⁹ the conclusion of which was a 'life-like picture of the character of Ptolemy Philopator' (σωματοειδῆ ποιήσας τὴν τοῦ βασιλέως προαίρεσιν);¹⁰ whereas the other events contained in Book xiv belong to Olympiad 144, 1, i.e. 204-203.¹¹

¹ P. Petrie III, 57b and P. Tebt. III, 1, 820; cf. also P. Tebt. I, 8.

² Sethe and Partsch, *op. cit.* The Rosetta inscription also points to the existence of a normal Year 1; see I. 16 μὲν πλείον διδῶσιν εἰς τὸ τελεστικόν οὐ ἐτάσσοντο ἕως τοῦ πρώτου ἔτους ἐπὶ τοῦ πατρὸς αὐτοῦ, where the reference is almost certainly to the first year of Epiphanes.

³ In *ZAS* 22 (1884), 101 ff.

⁴ Beloch, *op. cit.* IV, 2, 171.

⁵ Mond and Myres, *op. cit.* II, Inscriptions, no. 3, pp. 3, 28-29.

⁶ Dinamoore, *op. cit.*, 471; on the unreliability of Eusebios see Leuze, *op. cit.*, 225-7.

⁷ See Helm, *Abh. Ak. Berlin* 1923, vol. 4; Kubitschek, *op. cit.*, 54.

⁸ Holleaux, *Rev. ét. gr.* 13 (1900), 190, considered the possibility that the Escorial fragment came from Pol. XIV, but rejected it in his later consideration of the passage.

⁹ Pol. XIV, 12.

¹⁰ Notable as an exception to Polybios' usual practice: cf. Bruns, *Die Persönlichkeit in der Geschichtsschreibung*, 1-11, 84-100.

¹¹ Cf. Pol. XIV, 1a, 5: οὐ τὰς ἐκ τῶν ὀκτὼ ἐτῶν πράξεις κατατεράχμεν εἰς μίαν βύβλον.

The assumption that Epiphanes' accession was in 203 is strikingly confirmed by the events following the agreement made by Philip V of Macedon and Antiochos III of Syria to plunder the possessions of the young king.¹ This agreement followed immediately upon the two kings' learning of Philopator's death.² Now it is a fact that Antiochos' invasion of Coele-Syria did not begin until 202,³ and no hostile act against Egypt is recorded of Philip until his capture of Samos in spring 201.⁴ Philip appears to have played a double game; and connected with this is the visit of Ptolemy, son of Sosibios, who was sent to Macedon by Agathocles soon after Epiphanes' succession,⁵ and did not return to Egypt until after Agathocles' overthrow.⁶ These facts are all consistent with an agreement between Philip and Antiochos in the winter of 203-202, and the accession of Epiphanes in 203. But they offer insuperable difficulties to the view that the accession was in 205; for in this case one has to assume either that Philip and Antiochos held their hands for three and two years respectively, or that (notwithstanding Polybios) the agreement was not made until two years after Philopator's death.

Further, there is the evidence relating to Scopas the Aetolian. The withdrawal of the Aetolians from the First Macedonian War by a separate peace in 206 had been followed by economic distress in Aetolia, and Scopas and Dorimachos were therefore appointed νομογράφοι to carry through legislation for the cancelling of debts, etc.⁷ Using this as a handle, Scopas then tried to secure election to the generalship of Aetolia for the year 205-204, but failing in this went off to Alexandria;⁸ he would thus reach Egypt in the autumn or winter of 205, and had at any rate time to obtain the king's favour, command over a considerable force of men, and a daily income of ten minae. This is not absolutely incompatible with the death of Philopator in 205, but it goes far more easily with a later date.

Finally, Justinus has the otherwise unrecorded tradition that the death of Philopator was *diu occultata* by the palace clique.⁹

Thus the evidence points three different ways. The mass of the demotic documents, the Rosetta and Damanhūr inscriptions, and Justinus' statement concerning Epiphanes' age

¹ Pol. III, 2, 8; xv, 20, 25, 19; xvi, 1, 9; App. Mac. 4; Just. xxx, 2, 8; Hier. in Daniel. xi, 13.

According to Pol. xv, 20, 1, they had previously offered him help—probably in the internal troubles referred to in Pol. xiv, 12, 4.

² Pol. xvi, 22a; Just. xxxi, 1; Hier. in Daniel. xi, 11 ff.; Holleaux, *CAH* VIII, 151-2.

³ See Holleaux, *Rev. ét. anc.* 22 (1920), 237 ff., *CAH* VIII, 151; Bickermann, *Rev. de phil.* 61 (1935), 162 ff. Passerini, *Athenaeum* 9 (1931), 260, would put back the capture of Samos into 202, in accordance with his theory of an open break between Egypt and Macedon in winter 203-202; but he scarcely meets Holleaux's arguments in favour of 201, and in particular the evidence of Pol. xvi, 2, 9: τὰς γὰρ ἐν τῇ Σάμῳ ναῦς οὐκ ᾔδυνήθη καταρτίσαι πάσας.

⁴ Pol. xv, 25, 13.

⁵ Pol. xvi, 22, 3. From Pol. xv, 24a and 25, 19 it is clear that the account of the reception of this Ptolemy by Philip was contained in Book xv of Polybios, and therefore that it occurred during, or within the month or two following, the Olympiad year 203-202.

⁶ Pol. XIII, 1-1a.

⁷ Pol. XIII, 2, 1: ὅτι Σκόπας Αἰτωλῶν στρατηγὸς ἀποτυχὼν τῆς ἀρχῆς, ἧς χάριν ἐτοίμα γράφειν τοὺς νόμους, μετέωρος ἦν εἰς τὴν Ἀλεξανδρείαν. This passage is translated by W. R. Paton in the Loeb edition 'when he fell from the office, by power of which he ventured to draft these laws'; I doubt, however, if χάριν can bear this sense, and prefer to take ἀρχή as the office of στρατηγός. There is support for this in an inscription (Ditt. *Syll.*³ 597 B), which refers to a Λύκωπον Πολεμάρχον Καλυδόνιον as general of the Aetolians about 205-201. Pomtow (commenting on Ditt. *Syll.*³ 546 A) puts Lycopos' office in 205-204, and this fits in remarkably well with the opposition Scopas received from Alexander of Calydon (Pol. XIII, 1a). Apparently Alexander was successful in getting his own candidate from Calydon elected against Scopas, who then went to try his fortunes in Egypt; cf. Lenschau, *Bursian* 54 (1928), 148; Holleaux, *CAH* VIII, 147; Passerini, *Athenaeum* 11 (1933), 319.

⁸ Just. xxx, 2, 6.

when Philopator died, suggest that the death of Philopator and accession of Epiphanes occurred during the Egyptian year 205-204, possibly on November 28, 205; the Khatchap inscription, edited by Stern, supports an accession in 204-203—on November 28, 204, if one accepts the usual equation with Phaophi 17; and finally the evidence of Polybios, with some support from the details relating to Scopas and the agreement between Philip and Antiochos, is in favour of an accession in the year 203-202—November 28, 203, on the basis of the same equation. Hieronymus, Eusebios, and the *Chronicon Paschale* have been discarded as too unreliable. And finally we have Justinus' assumption of a gap between the death of Philopator and the accession of his son.

The attempts to solve the problem fall into four groups; in none has the demotic evidence been taken into account.

(a) *Philopator died and Epiphanes succeeded in November 203.* This view, which involves the rejection of the Canon, and is contradicted by Justinus and the Rosetta evidence, is that adopted by Ernst Meyer,¹ Bevan,² Wilhelm,³ Welles,⁴ Jouguet,⁵ and Ferguson.⁶ Of these Bevan is by no means consistent, for he places the Anacleteria in November 197 and the Rosetta decree in March 196, yet translates 'in the ninth year' without comment, though by his own reckoning it would be only the seventh.⁷ Holleaux, in a series of comments on this problem⁸ also adopts this view, but he makes an attempt to face the difficulty of the Rosetta evidence; first of all he reduces the discrepancy of two years to one by putting the Anacleteria in 196 instead of 197,⁹ and then deals with the remaining year by saying that 'for some reason hitherto unexplained' Epiphanes' first year was counted as his second.¹⁰ This explanation is plainly inadequate.

(b) *Philopator died and Epiphanes succeeded in November 205.* This view involves the rejection of the evidence of Justinus and Polybios, and the ignoring of the historical situation during the years in question. Dinsmoor, who adopts this theory,¹¹ falls back upon the suggestion of Holleaux that the fragment Pol. xv, 25 may be from Book xiv; the other objections he ignores. This date is also more or less the one adopted by Wałek-Czernecki,¹² who considers that the death of Philopator was early enough to influence Philip at the Peace of Phoenice; but I know of no detailed defence of this bold theory.

(c) *Philopator died and Epiphanes succeeded in November 204.* This theory, which seeks to solve the problem by a compromise, is that adopted by De Sanctis,¹³ if I have understood him correctly; for his account is decidedly ambiguous. He begins by pointing out, like Holleaux,¹⁴ that the proclamation of the accession of Epiphanes is described in Pol. xv, which gives the events of Ol. 144, 2 = 203-202. Philopator's death cannot, therefore, he claims, be earlier than 204-203; and in fact, as he justly points out, the summary of that Ptolemy's character in Pol. xiv, 11-12, was probably inserted in connexion with his death

¹ *Op. cit.*, 39 ff.

² *Op. cit.*, 250.

³ *Wien. Anz.* 57 (1920), 40-57.

⁴ *Royal Correspond. of the Hellen. Age*, 167.

⁵ *L'impérialisme macédonien et l'hellénisation de l'orient*, 257.

⁶ *Hellenistic Athens*, 267.

⁷ *Op. cit.*, 263.

⁸ *Rev. ét. gr.* 12 (1899), p. 35, n. 1; 13 (1900), p. 190, n. 2; *BCH* 30 (1906), p. 473, n. 2; *Klio* 8 (1908), p. 268, n. 6; *Rev. ét. anc.* 15 (1913), p. 9, n. 3; *Rome, la Grèce et les monarchies hellénistiques*, p. 71, n. 1; *Rev. de phil.* 50 (1926), 215-16; *CAH* viii, 148-9.

⁹ See above, p. 21.

¹⁰ *CAH* viii, *loc. cit.*

¹¹ *Op. cit.*, 493, note continued from 492.

¹² *Rev. de phil.* 49 (1925), 45 ff.; 52 (1928), 24, note. See the criticism by Holleaux, *Rev. de phil.* 50 (1926), *loc. cit.*

¹³ *Op. cit.* iv, 1, p. 1, n. 2; cf. also p. 127, n. 39; p. 128, n. 41.

¹⁴ *BCH* 30 (1906), p. 473, n. 2.

in the year 204-203. This seems to assume a gap of at any rate part of a year between Philopator's death and the proclamation of Epiphanes' succession; but De Sanctis makes no reference to such a gap. Instead he speaks of Philopator's death being 'circa quella ol.' i.e. Ol. 144, 1 = 204-203. This is the first difficulty in his account. The second is that, quoting from the Rosetta inscription, he speaks of the day 'in cui l'Epifane salì al trono' (the Greek being ἐν ᾗ παρέλαβεν τὴν βασιλείαν παρὰ τοῦ πατρός) i.e. Phaophi 17, without making clear whether he refers this to the death of Philopator (in which case the accession is of a purely theoretical kind), or to the actual proclamation to the soldiers described in Pol. xv. For this ambiguous date 'there is the choice between November 28, 204, and November 28, 203'; either is possible, 'tenuto conto della elasticità della cronologia polibiana'. But the former is preferable.

If by 'the day on which Epiphanes received the kingdom from his father' De Sanctis means the day on which Agathocles proclaimed him king before the Macedonians, then his theory is open to an overwhelming objection. De Sanctis has himself already admitted that this incident is contained in Pol. xv, and that this book gives the events of Ol. 144, 2 = 203-202; here, then, is a discrepancy which 'the elasticity of Polybian chronology' will not bridge. For although De Sanctis has shown elsewhere¹ that Polybios occasionally includes events which are later than the actual Olympiad year with which a particular book is concerned, the only examples he can find for events being taken from a preceding Olympiad year are certain details which Polybios puts under Ol. 140, 1, because they are strictly relevant to, though in point of time they precede, the period at which his history proper begins. Plainly these events, at the opening of his work, occupy a unique position and constitute no precedent for the economy of the later books.

On the other hand De Sanctis may mean to imply that the quotation from the Rosetta inscription refers to the date of Philopator's death, and that this was later taken as the official accession date of Epiphanes, without any regard for the actual date (in 203-202) when Agathocles proclaimed him king. In this case his omission of all reference to the gap of about eight months between the two events is inexplicable; nor is it clear how and when the actual date of Philopator's death was later discovered, after the interval during which it had, presumably, been concealed.

In either case, reckoning from November 204² to his postponed Anacleteria in November 196 and the Rosetta inscription in 195, De Sanctis obtains the requisite eight years between the accession and the coming of age. But apart from its ambiguity, his solution has the disadvantages of fitting neither the Canon and archaeological evidence nor Polybios, of ignoring the historical situation as revealed in the bargain between Philip and Antiochos, and of misinterpreting the date of the Rosetta inscription. It may therefore be safely rejected.

(d) *Epiphanes succeeded in November 203, Philopator having died some time previously.* This view, which is that of Niese,³ Bouché-Leclercq⁴ and Niccolini,⁵ and more recently of Cary,⁶ Paola Zancan⁷ and Granier,⁸ rests on the statement of Justinus, already mentioned, that the death of Philopator was *diu occultata*. The main weakness of this view is that it fails

¹ *Op. cit.* III, 1, 219 ff.

² Dinsmoor, *loc. cit.*, is mistaken in placing De Sanctis among those scholars who accept November 203 as the date of Epiphanes' accession.

³ *Op. cit.* II, p. 573, n. 2.

⁴ *Histoire des Lagides* I, 335-7.

⁵ *La confederazione achea*, p. 110, n. 2.

⁶ *History of the Greek World from 323 to 146*, 93.

⁷ *Il monarcato ellenistico nei suoi elementi federativi*, 44-5.

⁸ *Die makedonische Heeresversammlung*, 140-4.

to take full account of the Rosetta inscription; thus Niese,¹ for example, puts the Anacleteria in March 196, and calls this Epiphanes' ninth year; whereas by his own reckoning it is only his seventh. And in any case the full weight of the demotic evidence is against it.

This general *impasse* has two causes: first a false assumption, and secondly a failure to see that there are two distinct, and in their own way correct, versions of the date of accession; these are the official date of 205-204, as given in the Canon, the Rosetta inscription and the mass of the demotic evidence, and the actual date, as given in Polybios. The clue which eventually reconciles these two versions is Justinus' statement that the death of Philopator was *diu occultata*. In fact, difficult though it may at first sight appear, the only solution compatible with all the evidence is that the death was concealed for about a year. As De Sanctis saw,² Polybios relates the death in Book xiv (204-203), and takes this opportunity to survey the Egyptian events covering a number of years and to give a short character-sketch of the dead king.³ To fit the Canon this death must have been before October 12, 204, and to fit Polybios, later than midsummer 204; it may be provisionally placed in September of that year. The two men in highest authority at that time were Sosibios and Agathocles, and the decision to conceal the death must have come from them. We can only guess at their motives. Mutual jealousy may have influenced them, both realizing that without the nominal authority of Philopator, their joint control must soon develop into an open struggle for power. There is, however, a much more probable explanation in the international situation. The year 204 marked a crisis in the Eastern Mediterranean. In 205 Philip V of Macedon had signed the Peace of Phoenice⁴ with Rome, and was henceforward free to turn his attention east; the summer of 204 was distinguished by his unscrupulous manoeuvres to stir up war between Rhodes and his allies in Crete,⁵ and by the freebooting expedition of Dicaearchos,⁶ an Aetolian in Philip's pay, whom he sent plundering in the Cyclades. As yet Philip had shown no hostility towards Egypt, but he was at least dangerous.

Antiochos constituted a more immediate threat. He had returned from his eastern Anabasis in the previous winter of 205-204, when Philip was winding up his affairs in the west, and at once he turned his eyes towards Egypt.⁷ Years of internal revolt⁸ and the weak rule of an effeminate king had rendered Egypt easy prey to a determined aggressor; and in spite of his feebleness, it was a major disaster that at this very moment Philopator should die, leaving a five-year-old boy to succeed him. Sosibios and Agathocles realized the danger, if not from a combination of Syria and Macedon, at any rate from Syria. They saw (and events proved them right) that the moment the news of Philopator's death was published, it would be the signal for attack; and not unreasonably they resolved to postpone making it public as long as possible, in the hopes that in the meantime something might happen to

¹ *Op. cit.* II, 673.

² See above, p. 26.

³ Pol. xiv, 12, 3: Πτολεμαῖος ὁ βασιλεὺς, περὶ οὗ νῦν ὁ λόγος, i.e. it is something directly connected with the king which occasions these Egyptian details in Polybios. As it is distinctly stated that the war which occupied Ptolemy's last years contained nothing μνήμης ἄξιον, his death is the only event to which Polybios can be referring.

⁴ Livy xxix, 12, 13.

⁵ Cf. Herzog, *Klio* 2 (1902), 316 ff.; Holleaux, *Klio* 13 (1913), 145 ff.; *Rev. ét. gr.* 30 (1917), 89 ff.; M. Segre, *Riv. di fil.* 61 (1933), 365. This is the so-called Κρητικός πόλεμος.

⁶ Pol. xviii, 54, 8; Diod. xxviii, 1; cf. Holleaux, *Rev. ét. gr.* 33 (1920), 223.

⁷ A letter from Antiochos to the people of Amyzon is preserved, dating from spring 203, which shows the king already expanding at Egypt's expense; Amyzon had been a Ptolemaic possession, but in spring 203 it entered the dominions of Syria. (Cf. Ernst Meyer, *op. cit.*, 41; Wilhelm, *Wien. Anz.* 57 (1920), 57; Welles, *op. cit.*, 165 ff.) For the fear of Antiochos felt even before his agreement with Philip cf. Pol. xv, 25, 13; 25, 17.

⁸ Bevan, *op. cit.*, 236 ff.

ease the situation. For there was at least a chance of a clash between Antiochos and Philip, both young and ambitious, both recently free from entanglements elsewhere, and Philip, moreover, of a hasty temperament and jealous of his more successful rival. Under these circumstances, any expedient was justified which might postpone the crisis.

The main obstacle to the concealment would have been Arsinoe, had she still been living with Philopator as his queen. A woman of spirit,¹ it is highly improbable that she would have submitted to a scheme which, with her on the throne, would have been quite unnecessary; for Hellenistic queens had repeatedly shown themselves able to deal with political crises.² There is, however, reason to believe that Arsinoe was no longer queen, but that for some years she had been divorced or at least separated from Philopator; though for reasons of policy (Arsinoe was popular with the people of Alexandria)³ it is improbable that there was an open breach, and she seems to have continued living in the royal palace. An inscription⁴ from the last years of Philopator's reign is inscribed 'On behalf of Ptolemy the great Father-loving God, Saviour and Victor, and of Ptolemy the Son', omitting any reference to Arsinoe; whereas a slightly earlier inscription⁵ has the dedication 'On behalf of King Ptolemy and Queen Arsinoe and Ptolemy the Son, Father-loving Gods, etc.'. Bevan's comment⁶ on the omission in the later inscription is that 'in a private dedication, the dedicator might choose which members of the royal family to pray for'. But, in normal conditions, the omission of Arsinoe would have been, to say the least, invidious and impolitic; and it is easier to assume that she was by this time in definite disfavour. This view is supported by a fragment from Joannes Antiochenos,⁷ which reads: *ὅτι Πτολεμαίου ('Αγαθοκλείαν) τὴν ἑαυτοῦ γυναῖκα ἐκβαλόντος καὶ μᾶ τινὶ τῶν ἐταυρίδων συναφθέντος, εἴτα τελευτήσαντος Πτολεμαίου, ἡ 'Αγαθοκλεία 'Αρσινόην διαφθείρει δόλῳ· καὶ ταύτης σὺν τοῖς βασιλεῖσι διαφθαρείσῃς πολλῆς τε ταραχῆς ἐντεύθεν Αἰγυπτίους ἀναφθείσῃς, ὃ τε τῆς Συρίας βασιλεὺς Σέλευκος, καὶ τῆς Μακεδονίας Φίλιππος, ἐλπίδι τοῦ κρατήσεω τῆς χώρας σὺν προθυμίᾳ στρατεύουσιν κτλ.*

In spite of the obvious errors of *Agathocleia* for *Arsinoe* and *Seleucos* for *Antiochos*, the fragment is in accordance with the rest of our evidence; and Müller seems to be right in his suggestion⁸ that *σὺν τοῖς βασιλεῖσι διαφθαρείσῃς* means that Arsinoe was burnt to death in a deliberately started fire, which burnt down part of the palace.⁹ But the problem arises: when did Arsinoe's death take place? Now it appears very probable that in this fire we have an explanation of the *μετὰ δ' ἡμέρας τρεῖς ἢ τέτταρας* with which the Escorial fragment of Polybios¹⁰ opens, namely that the burning of the palace was used by Sosibios¹¹ and Agathocles as a pretended explanation of the deaths of Philopator and Arsinoe at one and the same time. Some days after it was over they summoned the army, announced the accession of Epiphanes, and produced two urns, one actually containing the ashes of Ptolemy, the other purporting to hold those of Arsinoe (who had perished in the fire), but really full of spices.¹²

¹ See the story of her in Athen. vii, 276a; cf. Bevan, *op. cit.*, 236.

² See Macurdy, *Hellenistic Queens*.

³ Cf. Pol. xv, 25, 9.

⁴ OGIS, 89.

⁵ OGIS, 86, the 'elephant-hunters' inscription.

⁶ *Op. cit.*, 243.

⁷ Joann. Antioch. Fr. 54 (FHG iv, 558).

⁸ Commenting in FHG *ad loc.*

⁹ Müller's other suggestion is that *τοῖς βασιλεῖσι* here means 'the royal treasure'; but why should Arsinoe perish 'with the treasure'? In any case a fire is indicated.

¹⁰ Pol. xv, 25, 3.

¹¹ Sosibios slips out of the story soon after the accession of Epiphanes, so that it appears probable that he died about now. The sketch in Pol. xv, 25, 1-2 was most likely inserted in connexion with his death; cf. Holleaux, *Rev. ét. anc.* 14 (1912), 370 ff.

¹² Pol. xv, 25, 6-7; Just. xxx, 1, 1; 2, 6. Justinus suggests that Arsinoe was murdered before Philopator's death; this is, from its lack of motive, improbable. Arsinoe was never a serious rival to Agathocleia, and her murder could only serve to enrage the people of Alexandria. Joannes' version, on the contrary, is in accordance with the account given by Polybios.

It is in the dating of these events at Alexandria that most scholars seem to have taken an unjustifiable step: they have assumed that the expression *ἐν ᾗ παρέλαβεν τὴν βασιλείαν παρὰ τοῦ πατρὸς*, in the Rosetta inscription (l. 47), necessarily refers to the crowning of Epiphanes by Agathocles on this occasion, and accordingly they have dated the events of Pol. xv, 25, 3 to November 28 (= Phaophi 17) of whatever year their particular theory requires. A little consideration will show that this identification is not merely unwarranted, but highly improbable. The date Phaophi 17, along with Mesore 30, Epiphanes' birthday, is singled out on the Rosetta Stone as a special festival and day of good omen (*αἱ δὲ πολλῶν ἀγαθῶν ἀρχηγοὶ πᾶσιν εἰσιν*); but there were for Epiphanes, as for most of the later Ptolemies, not one, but two days on which in some sense he became king, the first when he was inaugurated by his father as co-regent, shortly after his birth, and certainly before June 6, 209,¹ the second the occasion described in Polybios. There was a precedent, in the reign of Philadelphos, for actually reckoning one's accession from the date of co-regency; and though admittedly the phrase *παρέλαβεν τὴν βασιλείαν παρὰ τοῦ πατρὸς* is used in the Canopus decree² in reference to Euergetes' independent accession,³ this is no reason for assuming that it always bore this meaning. As a festival of good omen and celebration there could be little hesitation in Epiphanes' particular case in a choice between the date of co-regency, no doubt marked by full pomp and religious rites, and that of the ceremony performed by Agathocles, when the urns of Philopator and the murdered Arsinoe were so shamelessly displayed to the people. Thus there is *prima facie* a good case for the assumption that Phaophi 17 was the anniversary not of Epiphanes' accession, but of his co-regency.⁴ This is supported by the dates we know; if the king was born on October 9, 210, the following Phaophi 17 (= November 30) would be a reasonable time to elevate him to a share in the throne, allowing the appropriate interval for preparations to be made.

However, for the present it is sufficient if we merely admit the possibility that the Rosetta decree does not serve to date with certainty the events of Pol. xv, 25, 3. What, then, does the position in Polybios tell us of their date? Simply that they occurred during the Olympiad 144, 2 = 203-202; which in effect means within the limits August 203 and the end of the campaigning season 202. Now we have already seen from the Berlin demotic inscription of Khatap that Epiphanes' second Egyptian year was regarded as beginning on Thoth 1, 203 = October 13; on this basis, his first Egyptian year, which was reckoned from his accession until this date, began some time between October 13, 204, and October 12, 203. By a combination of this evidence and what can be deduced from Polybios, the accession can be narrowed down to the period August-October 12, 203. The only objection to this dating is the false identification with Phaophi 17, already discussed: it allows for a period of something between ten and fourteen months (August-October 204 to August-October 203) during which Philopator's death was concealed.

The problem now arises: why, after a year's successful concealment, did Agathocles and

¹ See above, p. 22.

² *OGIS*, 56, l. 7.

³ Dinamoer, *op. cit.*, 486. Tarn, *Antigonos Gonatas*, 433, would make a rigid distinction between *διαδέξασθαι* and *παράλαβεῖν*, which are, he claims, the official terms used for 'to accede' in the case of kings who began their reign as co-regents and those who followed a dead predecessor respectively. But this distinction cannot be upheld, since the term *παράλαβεῖν* is employed in reference to Epiphanes, about whose co-regency there is no question. Nor is there evidence to support a view that where a king was for a time co-regent, the term *διαδέξασθαι* was restricted to his assumption of co-regency and *παράλαβεῖν* to his independent accession.

⁴ This is the view taken by Smyly, P. Gurob, introduction, and Gauthier, *op. cit.* iv, 275; but it is illogical to assume with the latter that Phaophi 17 is the date both of the co-regency and the separate accession.

Sosibios decide during the late summer or early autumn of 203 to murder Arsinoë and have Epiphanes declared king? Here, of course, one is driven back on conjecture, but the most likely answer appears to be that the secret of Philopator's death had leaked out and perhaps reached Arsinoë. Once the facts began to be whispered abroad in Alexandria (and sooner or later this was inevitable) Agathocles' best course was to admit Philopator's death boldly; and whether Arsinoë knew the truth or not, as a popular figure for the discontented people of Alexandria to rally round, and an obstacle to complete control of the boy Epiphanes, she was safer out of the way. The burning of the palace was a clever device for the creation of an official legend of the simultaneous and accidental deaths of the king and queen; and this legend, whether believed or not, would, like all such official legends, compel general acceptance as long as Agathocles remained in power.

We may, then, assume Arsinoë's ignorance of the actual death of the king, and the outside world probably never saw Philopator now; towards the end of his reign he seems to have given himself up increasingly to the pleasures provided for him by the small palace clique.¹ The oriental court, to which that of Ptolemy approximated more and more, was fashioned on a policy of secrecy, and there were analogies for concealments and impersonations; thus in the sixth-century Persian court the Magus was able to hold the throne as Great King for some time after the death of Cambyses, 'never leaving the acropolis, and never calling any of the prominent Persians into his presence' until the imposture was detected by one of his wives.² And an analogy nearer home was the concealment of the death of Berenice by Euergetes in 246, at the time of the Third Syrian War; by the help of this, Euergetes seems to have advanced through Seleucid territory as far as Seleucia-on-the-Tigris, and obtained the allegiance of the governors of the upper provinces.³

Just how many people were a party to the plot cannot be ascertained with any certainty. Scopas the Aetolian, who held an important position in the army,⁴ must undoubtedly have been involved; this may in fact be in Polybios' mind when he writes⁵ οὐκ ἤρκεῖτο τοῦτοις, ὅς τὸ πρότερον προσκαρτερῶν τῷ πλείονι διετέλεσε, μέχρι διὰ τὴν ἀπληστίαν καὶ παρ' αὐτοῖς τοῖς διδοῦσι φθονηθεὶς τὸ πνεῦμα προσέθηκε τῷ χρυσίῳ. But whether he was the sole confederate of Agathocles and Sosibios is not easy to determine. The population of Alexandria would be no obstacle, for, as we saw, Philopator had long ago ceased to be a public figure. But the hoodwinking of the court circle was more difficult. The pretence that the king was seriously ill or a permanent invalid, though from many points of view the easiest way out, would in fact have defeated the very ends of the concealment, if our hypothesis as to Agathocles' reasons is correct. An invalid king, too ill to see any one, would afford as easy a prey to an unholy alliance between Philip and Antiochos as would an infant on the throne. And so the probability is that the concealment was effected by bribery in some cases and exclusion in others; and where any one promised to be particularly difficult to manage, there is nothing in the records of Agathocles and Sosibios to suggest that they would stop short of murder.⁶

So far our theory appears to fit the facts; but there is still a mass of evidence unexplained, including the Rosetta Stone, according to which Epiphanes' second year began on October 13, not of 203, but of 204; and, as we saw, this was the version given by the Canon. Evidently, then, at some time between Epiphanes' second year, when the gravestone to Khatḥap

¹ Pol. xiv, 11.

² Herod. iii, 68.

³ Cary, *op. cit.*, 88 and 398; authorities quoted, p. 399.

⁴ Pol. xiii, 2, 3.

⁵ Pol. xiii, 2, 4-5. The words τοῖς διδοῦσι refer, however, not merely to Agathocles and Sosibios, but to Tlepolemos and Aristomenes as well.

⁶ Cf. Pol. xv, 25, 1-2; 26a, giving their respective crime-sheets.

was set up, and his ninth year, when the Macedonian calendar-equation proves that the accession date was regarded as 205-204, a year must have been omitted; or alternatively a break occurred part of the way through one Egyptian year, and the period from then to the next Thoth 1 was regarded as a new year, with a fresh set of eponymous priests. The latter possibility cannot be entirely ruled out, for there is a certain case from the reign of Philopator of a priest and priestess holding office for less than a year.¹ However, the first suggestion is in itself preferable, if it can be reconciled with the evidence.

Fortunately this not only allows for such a suppression of a year, but even points to a reason why it should have occurred at one particular time. From the details given above² it will be seen that we have no records at all dated to the sixth year of Epiphanes. Admittedly this would in itself prove little, since there are no records for the reign of Philopator later than Year 15 (Hathur (?) = December (?), 208).³ But it is significant that from the records dated to Epiphanes' seventh year and onwards there has been a double change in the protocol; not only is Epiphanes now for the first time included as a god in the cult of Alexander and his own ancestors, but a new priestess-ship to Arsinoe Philopator now appears.⁴ Evidently at some time just previous to the seventh year this double change had been carried through with the appropriate religious rites; and it has been plausibly suggested⁵ that the institution of a priestess-ship to his mother by Epiphanes was an act of expiation for her murder by Agathocles.

A glance at the international situation at the end of Epiphanes' fifth year (reckoning his second year from October, 203) may suggest a reason for such an act of expiation, and also for the year's change in the calendar. Epiphanes' sixth year would normally have begun on Thoth 1 (= October 12), 199. Now the summer of 199 had been marked by a series of military disasters for Egypt;⁶ after his victory at Paneion in spring or summer 200, Antiochos had successfully shut Scopas up in Sidon, and throughout the winter of 200 and the first half of 199 three Egyptian armies had tried in vain to relieve it.⁷ It is not unreasonable to deduce a deterioration of Egyptian morale in the face of disasters like these; and what more natural than an attempt by the government to restore this morale by religious means! Just as the Anacleteria of Epiphanes was held in late autumn 197 to offset the bad effects of the conspiracy of Scopas;⁸ and just as, from time to time, it was customary to hold a *sed*-festival⁹ to 'recharge' the king with *mana*; so now the popular morale was restored by the deification of Epiphanes, and the institution of a priestess to Arsinoe. The latter innovation suggests that the events surrounding the death of Philopator had made a deep impression in Alexandria; and so makes it probable that the concealment of Philopator's death for about a year was by this time widely known. With the knowledge arose a question: who had been king between the death of Philopator and the accession of Epiphanes? Plainly, Epiphanes himself, who had been co-regent since November 30, 210; and if so, the current dating, which made his reign begin in autumn 203, was incorrect, and must be altered. There were two alternatives: either Epiphanes could follow the precedent of Philadelphos and begin to date his reign from his co-regency, or he could move his date

¹ Thompson, *op. cit.*, p. 19, nos. 30a, 30b, 31.

² See above, p. 23, n. 10.

³ Thompson, *op. cit.*, no. 38 of the Alexandrian dates.

⁴ Cf. *P. dem. Louvre* 2435, in PW. art. *Hierais*, n. 58; cf. Gauthier, *op. cit.* iv, 276.

⁵ Bouché-Leclercq, *op. cit.* i, p. 349, n. 2.

⁶ See Holleaux, *Klio* 8 (1908), 267-81, for the chronology of the Fifth Syrian War.

⁷ Hier. in *Daniel*, xi, 15-16.

⁸ Pol. xviii, 55: νομίζοντες δὲ λήψεσθαι τινα τὰ πράγματα κατὰστασιν καὶ πάλιν ἀρχὴν τῆς ἐπὶ τὸ βέλτιον προκοπῆς.

⁹ Bevan, *op. cit.*, 262.

of accession back to the time of his father's death, and call his sixth year his seventh. Apparently he, or his government, chose the latter; and so the seventh year of Epiphanes was made to begin on Thoth 1 (October 12), 199.¹ His ninth year, in which the Rosetta Stone was set up, therefore began in 197, as Dinsmoor calculated; and similarly all the remaining demotic evidence falls into place.

Thus two distinct traditions were established for the accession of Epiphanes, an official one which survives in the Canon, the Rosetta and Damanhūr inscriptions, and the documentary evidence, and a historical one which, as in Polybios, gives the actual events of early autumn 203, and which is also preserved in the inscription of Khathap. These two traditions, and the general mystery with which the events of the interregnum were shrouded, account for the two different dates presented by our sources, and for the omission of all details of the concealment in the surviving authorities. This omission, however, presents only an apparent obstacle to the explanation I have suggested. If we had Polybios complete, there can be no doubt that we should find there a full account of the whole matter; for Polybios, it must be remembered, dealt with Philopator's death in Book xiv, and postponed the account of its announcement by Agathocles to Book xv, that is, until the next Olympiad year. This in itself presents a difficulty which can hardly be solved except on the assumption of a passage of time between the two events; and when this gap is confirmed by a definite statement of Justinus, there seems no justification for further doubt. With the text of Polybios in its present fragmentary state, it might well have happened that no hint whatever of the concealment had survived; but in fact there are two such hints, the one certain, the other possible. First, the use of the word *ἀνθομολογῆσαι*² in connexion with Agathocles' announcement of Philopator's death is inexplicable unless it is assumed that that death had previously been concealed; and secondly it is a possibility, if nothing more, that the details of the court circle, which appear in Pol. xiv, 11,³ were inserted as part of an explanation of how a close cabal was able to conceal Philopator's death for about a year. On the other hand, they would be equally in place in a mere discussion of Philopator's character. In conclusion, it should be noticed that Justinus' statement that Epiphanes was five years old at his father's death is in accordance with the explanation here offered; for if Philopator died August–September 204, Epiphanes would be five years, ten months old at that time.

I append a table of relevant dates:

October 9	210	Birth of Epiphanes.
November 30	210	Epiphanes elevated to the throne as co-regent.
June 6	209	First documentary evidence of this.
Autumn	206	Aetolia makes a separate peace with Philip V.
Summer	205	Peace of Phoenice between Philip and Rome.
Autumn	205	Scopas fails to be elected general in Aetolia and comes to Egypt.
October 13	205	Beginning of Philopator's last year, according to the Canon.
Winter	205–204	Return of Antiochos from the upper provinces.
Summer	204	Philip active in promoting war between Rhodes and certain cities in Crete. Plundering expedition of Dicaearchos in the Cyclades.
August–Sept.(circa)	204	Death of Philopator: concealment of this.

¹ Such a change in the calendar for little more than superstitious reasons would be by no means unprecedented in the Hellenistic world; for a much more flagrant example cf. Plutarch, *Vit. Alex.* 16, according to whom Alexander, to satisfy the religious scruples of his soldiers against fighting in Daisios, inserted a second Artemisios.

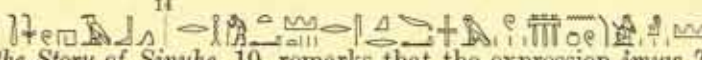
² Pol. xv, 25, 4: τὸν τοῦ βασιλέως καὶ τὸν τῆς βασιλείας θάνατον ἀνθομολογήσαντο. The word *ἀνθομολογῆσαι*, when it does not signify 'to agree with', has always the meaning 'to admit to, to confess' in Polybios; cf. v, 56, 4; x, 38, 3; xii, 28, 7; xxix, 6, 11; xxx, 8, 7.

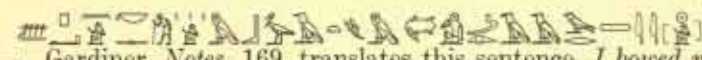
³ Fragments from Athenaeos, vi, 251c and xiii, 756c.

Spring	203	Antiochos' letter to the people of Amyzon.
August-Sept. (<i>circa</i>)	203	Burning of part of the palace at Alexandria: murder of Arsinoe.
(Five days later)		Accession of Epiphanes. Deaths of Philopator and Arsinoe revealed. First Egyptian year of Epiphanes begins.
Autumn	203	Agathocles sends Philammon, the murderer of Arsinoe, to Cyrene, Pelops to Antiochos, Ptolemy, son of Sosibios, to Philip, Scopas to Aetolia, and Ptolemy, son of Agesarchos, <i>via</i> Greece to Rome.
		Death of the elder Sosibios about this time.
October 13	203	Beginning of Epiphanes' second Egyptian year.
Winter	203-202	Philip and Antiochos make an agreement for the partition of the Ptolemaic possessions.
February 15	202	Death of the priest Khatap.
Summer	202	Antiochos moves against Coele-Syria (details uncertain).
Autumn	202	Ptolemy returns from Philip to Alexandria, where he finds Agathocles displaced by Tlepolemos.
April	201	Philip initiates his aggressive policy against Egypt with the capture of Samos.
Spring-summer	200	Antiochos' victory at Paneion.
Autumn 200-spring	199	Siege of Sidon.
October 12	199	Beginning of Epiphanes' seventh (= sixth) year: Epiphanes now elevated to the Alexander-cult: institution of a priestess to Arsinoe Philopator.
Summer-autumn	197	Conspiracy of Scopas.
November 26	197	Anacleteria of Ptolemy Epiphanes.
March 27	196	Rosetta Decree enacted.
October (<i>circa</i>)	196	Conference of Lysimacheia between Antiochos and the Roman commissioners.
Autumn	196	Betrothal of Epiphanes to Antiochos' daughter Cleopatra.
Winter	194-193	Marriage of Epiphanes and Cleopatra.

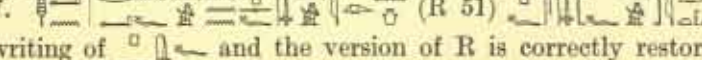



SOME NOTES ON THE STORY OF SINUHE AND OTHER EGYPTIAN TEXTS

By A. M. BLACKMAN


(1) *Sinuhe* R 13-14.  Gardiner in his *Notes on the Story of Sinuhe*, 10, remarks that the expression *imyw Thnw* is strange as a paraphrase for *Thnw*, and he finally, *op. cit.*, 153, inclines to the view that the sentence containing these words is an interpolation. Granted that *imyw Thnw* 'those who are (were) among the Tjehenu' is an odd expression for 'the Tjehenu', it must, however, be borne in mind that a sentence is far more likely to be omitted by a scribe than interpolated, and that R often proves to be a better text than the somewhat older B. But need *imyw Thnw* be a paraphrase for *Thnw*? For some years past in my lectures on this text I have translated the passage in question: *Now he (i.e. the Crown Prince) had been sent to chastise the foreign countries, to smite them that were (dwelling) among the Tjehenu*, regarding the last named not as Libyans, but as Egyptians, such as Sinuhe found in the company of Nenshi son of 'Amu (*Sinuhe* B 33-4) in Syria. At the same time I have suggested that *those who were among the Tjehenu* were exiled members and supporters of the old (Eleventh Dynasty) royal family, who, when the throne was seized by Amenemmes I, had sought safety among the Libyans. These Egyptians would have been constantly stirring up the Libyans to raid Egypt and would have given the usurpers as much trouble as possible. Hence the necessity for the expedition to the land of Timhi to smite them that were (dwelling) among the Tjehenu.

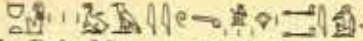
(2) *Sinuhe* R 44-5.  Gardiner, *Notes*, 169, translates this sentence, *I bowed me down in a thicket through fear lest the watcher on the wall for the day might see*. Erman, *Literatur*, 42, renders: *Ich bückte mich in ein Gebüsch, aus Furcht, dass mich der Wächter auf der Mauer, der Dienst hatte, sähe*.


In his *Grammar*, § 442, Gardiner points out that 'when *sdm.f* has prospective meaning after other verbs (than *rdi*), the gemination is rare'. He goes on to say that 'a few examples from the 2ae gem. class occur, and may be due to the intrinsic meaning of the verb-stems involved. So after *snf* "fear" and *mri* "wish"'. The force of the continuous action indicated by the use of the geminated form of *mri* is not fully brought out in either of the two translations cited. A better rendering, and one that does bring out this idea of continuous action, is *I crouched behind (lit. in) a bush in¹ fear lest the watchman on duty upon the wall should be looking (or on the look out)*.


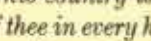
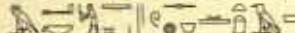
(3) *Sinuhe* B 26-7.  (R 51)  If  is simply a miswriting of  and the version of R is correctly restored,² the passage cannot be rendered, as apparently it always is, *He gave me water, he boiled milk for me*. *Ps.f*, which is perfective *sdm.f*, is here surely used in an adverb clause (Gardiner, *Grammar*, § 454), and the passage should be rendered, *Then he gave me water, while boiling milk for me*. In Egypt to this day milk is regularly boiled before being drunk, and the point of the sentence

¹ As Gunn rightly asserts, *m snf* does not mean 'through fear', 'aus Furcht', but 'in (a state of) fear'.

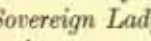
² C also has 


(8) *Sinuhe* B 132. . Despite Gardiner's remarks, *Notes*, 50, and *Hier. Pap. in the Brit. Mus.*, III, p. 20, n. 15, I am still not convinced that *hmwt tryw* means 'married women' in this passage. Why should especially married women groan? My view is that the writer inverted the natural order *tryw hmwt*, because he wanted to draw attention to the fact that not only the women but even the men groaned. Translate, therefore, (*Every heart was afire for me.*) *The women, (nay even) the men,¹ were groaning.*²

(9) *Sinuhe* B 159-60. . The generally accepted translation of this passage is, *What is a greater matter than that my corpse should be buried in the land wherein I was born?* Gardiner, *Grammar*, § 317, regards this passage as containing a very unusual instance of the old perfective being used in a virtual relative clause, the antecedent of which is defined. 'This example', he furthermore points out, 'stands alone inasmuch as the subject of the relative clause is not identical with the antecedent'.


All difficulty disappears if *tr* can be regarded as a synonym for Egypt—'the flat land'. This seems to be the case in the following three passages: *Sinuhe* B 230-2. *N ink is kī sī gr* . But neither was I presumptuous; (for) a man who knoweth his country is afraid, seeing that Rē hath put the fear of thee throughout Egypt (*ti*), the dread of thee in every hill-country (*hst nbt*); *Sinuhe* B 277-8. . He fled from Egypt for dread of thee; Griffith, *Kahun Papyri*, Pl. i, 2.  who protects Egypt and extends its boundaries.


If my suggestion is tenable, then the passage with which we are here concerned can be rendered: *What matter is weightier than that my body should be buried in Egypt, seeing that I was born therein?* *Ms-kwi* is thus used in a perfectly normal way in a subordinate explanatory clause.

(10) *Sinuhe* B 172-3. *May I serve the Sovereign Lady* . Gardiner, *Notes*, 63, 172 renders, *May she spend an eternity over me* (i.e. enjoying my service). But he regards the translation as dubious. The difficulty vanishes if we may suppose that *Sinuhe* is referring to his after-death existence and is identifying the Queen with the sky-goddess Nut. As living Queen she is certainly identified with that goddess in *Sinuhe* B 185-6, where we read, *This thy Heaven which is in the palace, she (yet) abideth and prospereth to-day*. The idea, therefore, may well be that the Queen will protect *Sinuhe* in death in the same manner as Nut was commonly supposed to protect the dead.³ As A. Rusch has made clear in his *Entwicklung der Himmelsgöttin Nut zu einer Totengottheit*, Leipzig, 1922, the roof of the burial chamber, the lid, the bottom, and indeed the whole of the sarcophagus, were identified with Nut, who thus extended her protection over the deceased throughout eternity.

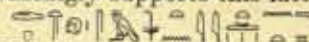
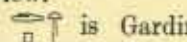









(11) *Sinuhe* B 193-4. . And a heaven is above thee as thou liest (lit. thou having being placed) in the hearse, while oxen drag thee. By 'a heaven above thee' is meant probably not in this case, as Gardiner suggests (*Notes*, 69), the lid of

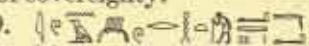











¹ When the tale was read aloud the effect we obtain by inserting the words 'nay even' would have been produced by a change of tone in the voice, which we should also make use of in addition to introducing 'nay even'. See, too, an interesting article by W. Golénischeff, entitled *Le rôle de l'intonation dans quelques textes égyptiens*, in *Mél. Maspero* I, 63 ff., which Gunn brought to my notice after I had written this note.

² I do not know what reason Gardiner has for translating  by 'shudder' in his *Grammar*, § 322, a translation which, as Gunn also feels, ill suits the determinative. His old 'jabber' and Sethe's 'seufzen' (*Erläuterungen*, p. 10), both seem more likely meanings.

³ In this connexion it is to be remembered that *Sinuhe* evidently hoped to be buried near the Queen's tomb, for, later on in the narrative, in the king's description of the ceremonies that will be performed at the returned exile's funeral, occur the words, *Thy pillars being fashioned of white stones*  in the midst of (the tombs of) the royal children, *Sinuhe* B 196-7.

the sarcophagus, but, as older scholars previously maintained, the \equiv -shaped canopy over the hearse. A scene in the tomb-chapel of Antefoker at Thebes (N. de G. Davies, *The Tomb of Antefoker*, Pl. xxi) convincingly supports this latter view.

(12) *Sinuhe* B 186. .  is Gardiner's transcription (adopted by me in my *Middle-Egyptian Stories*, 32) of the hieratic signs, which he considers hopelessly corrupt (*Notes*, 67). Sethe, *Aegypt. Lesestücke*, p. 11, suggests that the signs in question may be a corruption of the hieratic writing of . Professor Gunn and I, while discussing this passage, came to the conclusion that what the ancient copyist had before him was not  but . , *krpt*, *Pap. Edwin Smith*, 22, 6, is the word for a piece of linen spread over the mouth of a jar (see *Wb.* v, 104), while  (*op. cit.* v, 118), to which Professor Gunn drew my attention, is a 'bandage', occurring in the combination —, 'a bandage of linen'. It is highly probable that *krpt* and , transliterated *kp* in *Wb.* v, 118, are both connected with the root *knp*, from which are derived both the transitive verb *knp* to 'roof' a building, 'cover' some one or something with wings, found only in Late-Egn. according to *Wb.*, and the intransitive verb *knp* 'hide oneself', 'take cover', not current, according to the same authority, before the Nineteenth Dynasty. But that *knp* is an old verb is shown by the expression *sp n knp*, *Pap. Edwin Smith* 4, 3. Therefore  etc. may well mean, *her head is covered with the sovereignty of the land*, i.e., she is alive and wearing on her head the emblems of sovereignty.

(13) *Sinuhe* B 198-9. . Gardiner renders this passage: *Yea, all these things shall fall to the ground. Wherefore think of thy corpse and come*, and accordingly would emend *hw n r nc*. Professor Gunn suggested to me some time ago a brilliant translation of the difficult first clause. *Hwt t* he takes to be an expression for 'roving', 'wandering'. For *hwt mtn* 'tread a road', see *Admonitions* 4, 6; *Urkunden* iv, 385; *Rochemonteix*, *Edfou* i, 17 (20). 95. See also *hw-n-tn* *št* 'ye trod the sand', Newberry, *El-Bersheh*, Pl. xviii; *JEA* 2, p. 13; the new *Dream Papyrus* (= *Pap. Chester Beatty*, No. III), 7, 15,           

garments having been laid aside. *Wih* is in the passive *sdm.f* form used in a subordinate clause, as is *šd* in *Pap. Westcar* 10, 11, 19; 11, 2; see A. H. Gardiner, *ZAS* 66, 71. As Gunn points out, Sethe also held this view; see his *Erläuterungen*, p. 27, 1.

(21) *Pap. Westcar* 8, 11-12. Erman, *Literatur* 71, translates: *Dedi sagte: „wer gerufen wird kommt; der König rief mich und da bin ich gekommen.“* I was at one time inclined to follow Erman's translation of the latter half of the passage, taking *nīs*, as he evidently does,¹ as old perfective. My reason for so doing was that elsewhere in this story *ity*, wherever it occurs as a vocative, is found in the combination *ity nb.t* 'O sovereign, my lord'. However, I pointed out to students that if *ity* is vocative, then *nīs* is impersonal passive *sdm.f* and *nīs r-i* must be translated 'I have been summoned', the construction being the same as in *ist hīb r msw nsw* (*Sinuhe* R 22-3) and in *iw iw iś n-i* (*Sinuhe* B 248). But Gunn has convinced me that the latter interpretation is the correct one, for, as he rightly maintains, the old perfective of *nīs* would necessarily have passive meaning. Sethe (*Lesestücke* 30, 20), judging from his spacing of the text and from the reference to Erman's *Grammatik*, § 380, evidently regarded *ity* as vocative but *nīs* as imperative. He would, I suppose, have translated the passage from *nīs w pw* onwards, *It is he who is summoned who comes, O Sovereign. Summon me, and behold, I am come.*

The meaning that this translation assigns to Djedi's words is not very satisfactory, and there seems to me now to be no doubt as to the correct rendering of the whole passage—which is the reply to the question, *How comes it, Djedi, that I have not been allowed to see thee (heretofore)?*—and that is: *And Djedi said, He who comes² is one who has been called,³ O Sovereign. I was summoned, and lo! I am come.*

(22) *Pap. Westcar* 8, 15-16. Have brought to me the prisoner who is in the prison, when his injury has been inflicted, i.e., when he has been executed. 'When he has been executed' and not 'on whom sentence hath been passed' (see *JEA* 16, 66) is clearly the correct rendering of *wd nkn.f*, *wd* being passive *sdm.f*. Judging from *Grammar*, § 423, n. 6, Gardiner evidently holds the view that (Pap. Westcar 8, 17-18) means, *And a goose was brought to him, when its head had been cut off*, or, as we should say, *with its head cut off*.⁴ Thus even in the case of the goose Djedi was not called upon to do the actual beheading, which would indeed have made an unpleasant mess in the pillared hall where the magician was to give an exhibition of his powers.

(23) *Pap. Westcar* 9, 21. . With this word *hršw* 'bundles' of vegetables, cf. the modern Egyptian Arabic word *شربش*, which bears the same meaning 'bundle' and may well be a survival from the ancient language.

(24) *Pap. Westcar* 10, 1. and Khnum was with them carrying the chair. Erman, *Literatur* 74, renders *und Chnum war mit ihnen und trug ihren Tragsessel (?)*. *Wb.* v, 51, seems to regard *kni* as a different word to 'carrying-chair', which occurs in *Pap. Westcar* 7, 12, 14, and may be correct in assigning the meaning 'Träger des Gepäcks' to *Pap. Westcar* 11, 7, especially in view of the position of the



¹ Also Gardiner, *Grammar*, § 320, n. 46.

² Gunn, contrary to Gardiner, *Grammar*, §§ 357, 359, tells me he thinks here is the imperfective participle, the perfective participle in this text being written (12, 7).

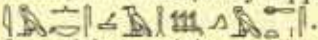
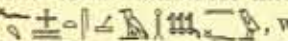
³ See Gardiner, *op. cit.* § 361.


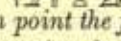



⁴ See E. Dévaud, *Rec. de trav.*, 39, 20 ff.

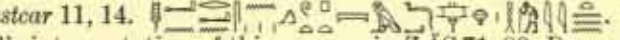
⁵ *Wd.t tp.f* might also be a virtual relative clause, *whose head had been cut off*.

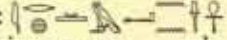
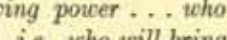
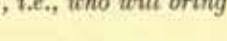
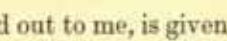

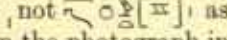
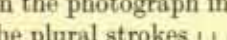
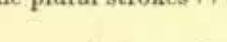
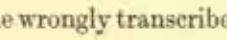
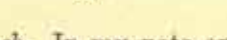
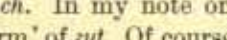
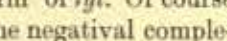
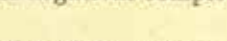
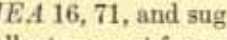
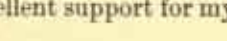




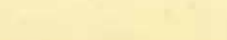
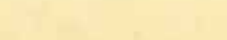

determinative . However,  is used as the determinative of *knw* 'carrying-chair' in Ptolemaic texts and may have been so used at a much earlier date.

But if the word *kn* can mean 'chair' equally with *knw*, the chair in question cannot be a 'carrying-chair', which, if occupied, would require at least two men to support it. I venture to suggest that *kn* is a wooden confinement-stool, such as the Egyptian peasant women still sit upon when being delivered of a child, and which the midwife takes about with her from house to house (see W. S. Blackman, *The Fellāhīn of Upper Egypt*, 63).

(25) *Pap. Westcar* 10, 16. . I suggested as long ago as 1924 (*JEA* 10, 196) that the verb *sh* used here might well be derived from *sh* 'toe', and that this sentence should be translated, *Do not toe it* (i.e. *jump about*) *in her womb*. Since then I have come across some confirmation for this suggestion in *Pyr.* § 959 c, where Seth is represented as saying , words which possibly mean, *It was indeed he who kicked me*. Accordingly the passage under discussion would be better rendered, *Do not kick in her womb*.

If the verb *sh* is derived from *sh* "toe" and means "toe it", "kick", then the verb  *db* (Sethe *Aegypt. Lesestücke*, 42, 17) may possibly be derived from *db* "finger" and mean "point the finger", not, as Sethe suggests (*Erläuterungen*, p. 59), probably connecting the verb with *dbw* "blame" (*Wb.* v, 567), "take offence". The passage containing the verb in question *hw pw if*  (*Lesestücke, ibid.*) might, therefore, be rendered *Gluttony is a disgrace, men point the finger at it*. It could be objected that the determinative  suits Sethe's interpretation better than mine. On the other hand  depicts a man with his fingers raised to his lips, and so the sign may have been regarded as an appropriate determinative for an action of one or more of the fingers. *Dbw* "blame", despite the determinative , may well be a derivative of this verb *db*. Compare further, perhaps, *ꜥgt* "hoof" and (through a meaning "to kick"?) *ꜥg* "to thrash".

(26) *Pap. Westcar* 11, 14. . There is much to be said for J. Spiegel's interpretation of this passage in *ZAS* 71, 80, *Da veranlasste sie, dass der Himmel (genauer gesagt) Sturm und Regen kam*, of which a more literary version would be, *Then they caused storm and rain to gather in the sky*.

This expression finds an excellent parallel, which hitherto does not seem to have been noticed, in an ancient text published by Professor Kees in *ZAS* 57, 104:                      

ORION AND THE GREAT STAR

By G. A. WAINWRIGHT

In the Pyramid Texts, § 882, it is said: *O Pepi! Thou art that Great Star, the Supporter of Orion (Šh); travelling through heaven with Orion, navigating the Dwyt with Osiris.* Although the name of the Great Star is not given, his identity and the meaning of the statements made about him are unmistakable for any one, who has watched the skies in Egypt night after night.

The most splendid constellation in the southern sky is Orion, and in close connexion with him is Sirius, which is the largest and most glorious of the fixed stars. When, therefore, we read of a 'Great Star' in connexion with Orion there is little doubt that the reference is to Sirius.

In the next place, on his rising each night Orion does not stand upright as he does when high overhead, but lies flat on his back. In this attitude he is gradually pushed up above the horizon, which in Egypt is quite flat and limitless. Soon after he is clear of the horizon Sirius (Špdt, Sothis) follows below him, and appears to be almost exactly under his belt (Fig. 1). In this way the two might be compared to the acrobats who used commonly to exhibit a certain feat of strength. This consisted in one man's putting his hand in the small of the back of another and so raising him above his head. The man lying supine, balanced across the hand at his middle, was in exactly the position of Orion to Sirius at their rising. Once the idea has occurred to the observer that Sirius is pushing up Orion extended across him, the simile is a very striking one. The phenomenon of the two rising together can scarcely be overlooked, for as stated above each of them is in itself a splendid spectacle.

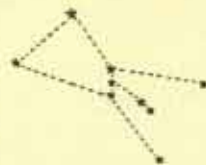


FIG. 1. Horizon at Heliopolis

Having been pushed up above the horizon in a recumbent position, Orion gradually stands upright. Sirius then assumes the position in which we usually see him in our cloudy northern latitudes, i.e. behind Orion at the level of his feet (Fig. 2). It was this that caused the Greeks to call him 'The Dog of Orion',¹ for, as they conceived of Orion as a huntsman striding across the sky, they quite naturally thought of Sirius as the hound following at his master's heels. The Egyptians had also appreciated this second association of the two—the way in which they pass over the heavens together. For our text goes on to state that another of 'the Great Star's' activities was 'travelling through heaven with Orion', who himself, as we are told elsewhere, was 'long of step and wide of stride'.² Thus, while the Greeks degraded Sirius into a mere hound, the Egyptians thought of him as a companion to Orion.



FIG. 2. Orion and Sirius at their meridian

The two together represent the southern skies on the Heracleopolitan coffins³ in opposi-

¹ *Iliad*, xxii, 29, 30; hence our own name 'The Dog Star'.

² *Cf. Pyr.* § 959, where Orion is called 'Leader of Upper Egypt'.

³ *Pyr.* § 959.

tion to *Mštyt* 'The Great Bear', who represents the northern skies. In ancient times these roles were even more fitting for each group of stars than they are today. In Pharaonic days Orion and Sirius were considerably lower in the skies at their meridian altitude than they are to-day, and they also rose and set farther along the horizon towards the south.¹ This, and the fact that the Great Bear played the part of pole-star,² brought the two groups very definitely into opposition.

On the coffins of Heracleopolitan type Orion is shown looking backward over his shoulder,³ and this remained usual during the rest of the Pharaonic period.⁴ In the Pyramid Texts, however, the only human determinative given to Orion looks forward, and not backward,⁵ an attitude to which Orion returns in the Ptolemaic and Roman days.⁶ It might have been supposed that it was at his follower Sirius that he was looking. But this was not so, for the inscription that accompanies him on the coffins regularly says *Orion* (Ššḥ), *turn thy head, that thou mayest see Osiris*.⁷

¹ I have to thank Miss Williamson of the Department of Applied Mathematics, University College, London, for kindly making the necessary astronomical calculations. As in *Griffith Studies* we took the year 3500 B.C. at Heliopolis as the starting point.

² Wainwright, in *Griffith Studies*, 380.

³ Chassinat and Palanque, *Assiout*, pl. xxv, p. 148, and no doubt pp. 119, 128, 193; Winlock, *The Egyptian Expedition for 1920-1921* (published as *Bull. of the Metropolitan Museum of Art*, New York, Nov. 1921, Pt. 2), fig. 24, p. 49.

⁴ Maspero, *Ann. Serv.* 3, p. 207, north face; Winlock, *The Egyptian Expedition for 1925-1927* (published as *Bull. of the Metrop. Mus. of Art*, New York, Feb. 1928, Pt. 2), fig. 40, p. 40; L. D. III, pl. 137; Id., *op. cit.* III, pls. 170, 171.

⁵ L.D. IV, pl. 49, c; Petrie, *Athribis*, pl. xxxvii (= xxxvi). By this time some confusion seems to have arisen between him and *Twr-nw*. But he is sufficiently identified by his crown of Upper Egypt, and in the first scene by the goddess of the single star who follows him.

⁶ Chassinat and Palanque, *op. cit.*, 119, 128, 148, 193; Lacau, *Sarcs. ants. au nouvel empire* II, 110.

⁷ *Pyr.* § 1436.

TWO BURIALS FROM THE SOUTH LIBYAN DESERT

By W. B. KENNEDY SHAW

With Plate iv

I

EARLY in November 1930 a small expedition under the leadership of Major R. A. Bagnold crossed the desert from Jebel 'Uweināt to Selīma Oasis. About 100 miles south-east of 'Uweināt we entered an area of scattered hills and flat-topped sandstone ridges. Amongst these lay a broad, sandy valley, in the bottom of which was a little green grass (*Aristida acutiflora* and *Fagonia Bruguieri*).¹ In those days one was ever on the look-out for the mythical Zerzūra, the lost oasis of the Libyan Desert, and this seemed as promising a locality as any. We should have liked to stop and explore the neighbourhood more carefully, but time was short, and owing to the total loss of one of our three cars a few days before, six men and all their belongings were packed into the remaining two. Though the grass was most probably due to surface rainfall we seemed to have been descending, and there was always a chance of artesian water in the vicinity. An omission—by the writer—to take aneroid readings for altitude left things still more in doubt. So we left Grassy Valley, as we called it, with the resolve to explore it further if another chance arose.

This opportunity came in February 1935, during an expedition under the leadership of the writer, the other members of the party being the late Colonel G. A. Strutt and Mrs. Strutt, Lt. R. N. Harding Newman, Mr. R. E. McEuen, and Mr. M. H. Mason. We reached Grassy Valley from Selīma Oasis, and on arrival cars radiated out in all directions to explore the country. The grass of 1930 was dried, and aneroid readings soon showed that there was little chance of artesian water; the desert surface here must be some 600 ft. above the static water-level. Zerzūra had escaped us again, but our visit was not unrewarded. At the foot of an isolated sandstone hill we found a solitary cairn of stones about 4 ft. high and 5 yards across (Pl. iv, 1). Its exact position was Lat. 20° 59', Long. 26° 17'. This we proceeded to excavate ourselves, having no Quftis in the party. The cracks of the upper stones were filled with yellow blown sand; below these the stones were embedded fast in red sand compacted with oxides of iron. Roughly in the centre of the cairn was the burial. The body had apparently been laid in a shallow pan 12–18 in. below the normal desert surface, and a rough stone chamber built above it. The stones had collapsed, crushing the skeleton and smashing the one pot in the grave. The legs were flexed at the knees and bent back under the thighs; the body had probably been placed in an upright, squatting position facing south-east. Round the neck was a string of carnelian beads and near the left hand was one pot.

The following are the details of the objects in the grave:

Pot. See Pl. iv, 3. Hand-made. Compact clay, well mixed with few large quartz grains. Colour: Inside, black; outside, some black over lip, probably due to inefficient firing; remainder, dark red-brown (Ostwald scale 5.5 pg). Burnished. Lightly combed with a 14(?) tooth comb, teeth about 8 mm. apart, comb-marks not continuous. Nicks on rim made with same tool. Mending-holes at two breaks. The combing, though not

¹ *Geogr. Journal* 78, 30.

typical of the majority of Badarian pottery, closely resembles that on some specimens in the University College, London, collection, notably on a pot from tomb 5774, type Black-Topped Red 21 M (*The Badarian Civilization*, Pl. xiv). Naturally I am not, on this evidence, suggesting a Badarian date for this burial, but am merely calling attention to the obvious similarities. Rippled ware is common in Nubia at a much later date.

BEADS. 12 in number, all of carnelian (Pl. iv, 2). Oblate disc beads with hour-glass perforation. Diameter about 0.3 in., length 0.07 in.; one bead is larger. Mr. Beck, who has been good enough to examine the beads for me, writes: 'These are typical predynastic beads, similar to those found in considerable numbers in Egypt. I think that this type is usually associated with the second Predynastic period.'

SKULL. Dr. A. J. E. Cave, Assistant Conservator at the Royal College of Surgeons Museum, has kindly given me a report on both the burials dealt with in this article. Unfortunately the Grassy Valley skull was very badly disintegrated, and cannot be used for making deductions concerning age and sex. There are certain resemblances to the skull from Camp 49 (Pl. iv, 4)—low smooth forehead with profile contour continuous with that of the nasal region; mastoid processes small; palate high and well arched: but all that can be said, and that with great reserve, is that this skull *may* represent the male counterpart of that from Camp 49.

II

In 1933 Count L. E. de Almasy, on his way from Burg el Tuyūr to Merga, ran into a wide and deep depression below the otherwise uniformly flat desert surface. Next year Capt. G. L. Prendergast also visited this depression, and made a small collection of pottery and stone implements. From him I first heard of its existence. In March 1935, on our way north from Merga to Selima, we visited and surveyed the depression, which we designated as Camp 49. It has three arms, which from their junction radiate out NE., S., and SW. for some 10, 6, and 15 miles respectively. The bottom is sandy, rising to low cliffs, and at the lowest point is some 250 ft. below the general desert plateau but still 350 ft. or so above the static water contour, i.e. the height to which water would rise in an open well under artesian pressure. There is a number of old mud-pans in the bottom, and no doubt the water collecting there had made the place attractive to the early inhabitants of the desert. Half-way along the south-western branch of the depression, in Lat. 20° 25', Long. 27° 18', we found the second of the two burials recorded here. It was found by my seeing the upper side of the skull sticking out of the ground; the removal of a little sand exposed the rest of the skeleton. The body, the posture of which is shown in Pl. iv, 4, was lying on its right side with head to the east and the face looking north. The skeleton was well preserved, and we were able to bring back the skull, left femur, and innominate bones. Dr. Cave, concluding his full report on the skull, which I have not given *in extenso* here, remarks: 'In its form, contours, and various proportions this skull agrees so strikingly with the Predynastic Egyptian cranium that it may be referred to this type without hesitation, see list of measurements.' These measurements are given below.

The body was that of a female about 30-35 years old.

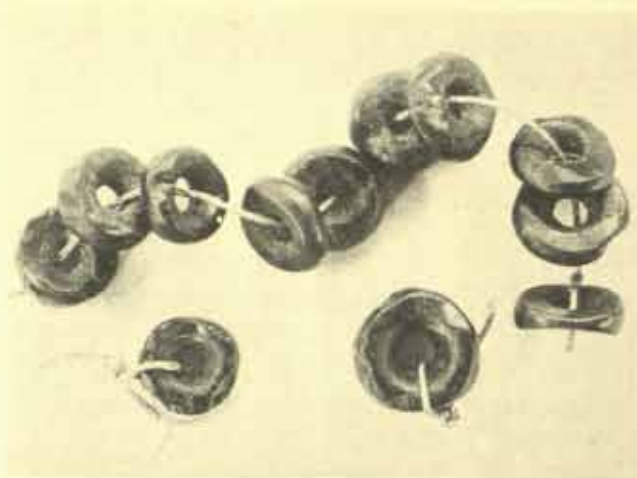
The body position differs from that usually found in Predynastic graves, where the head is nearly always to the south and the body on its left side, but in the case of burials in the Nile Valley the direction of the river was the deciding factor.

In Grassy Valley no sherds or implements were found. At Camp 49, on the other hand, were many objects of the types found in abundance along the banks of the Wādi Hāwa¹

¹ For Wādi Hāwa see *Geogr. Journal* 82, 103-29, 211-35.



1. Grave Cairn in Grassy Valley.



2. Beads from Grassy Valley.

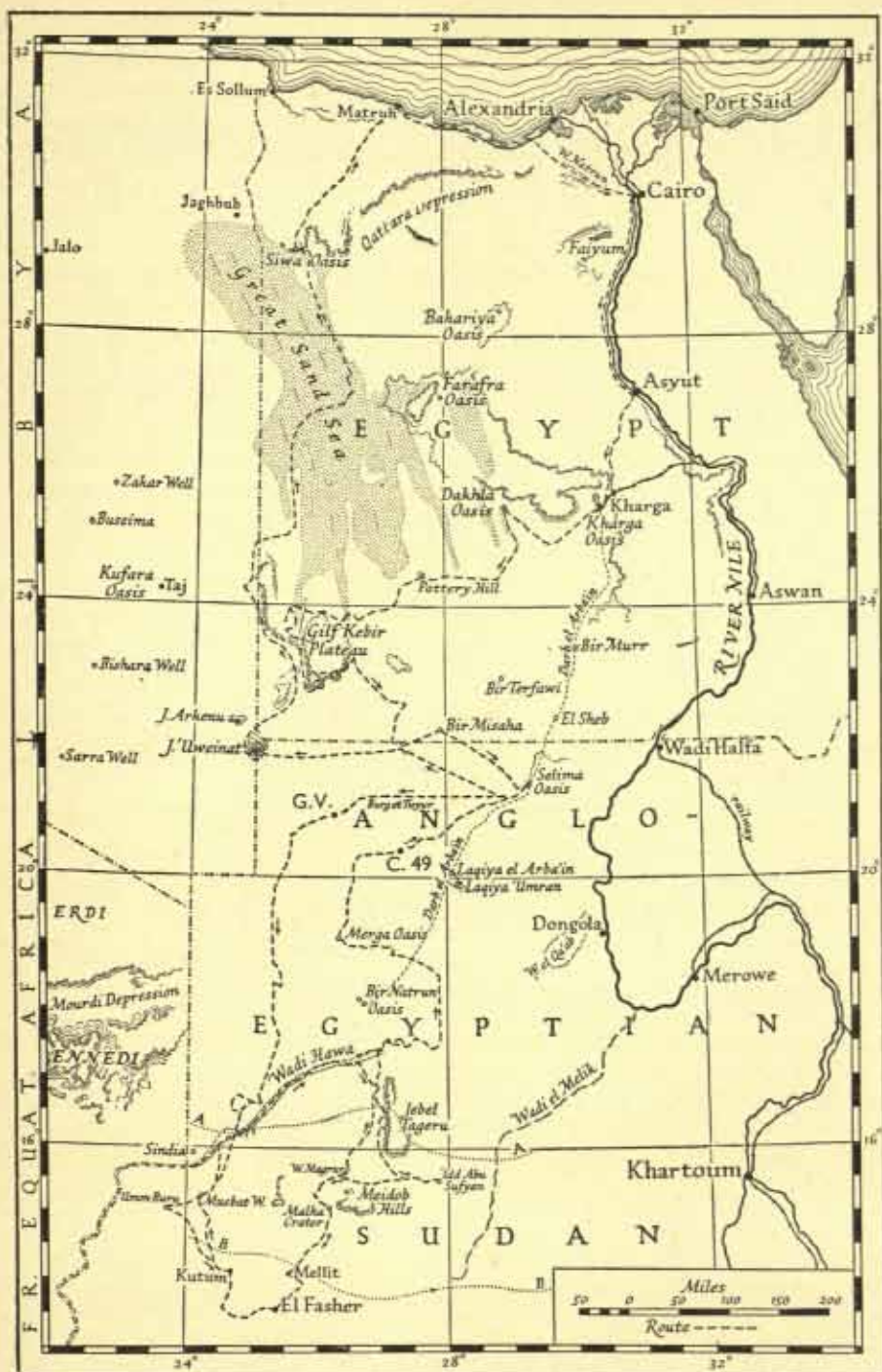


3. Pot from Grassy Valley. Scale 11 : 32.



4. Burial at Camp 49.

TWO BURIALS FROM THE SOUTH LIBYAN DESERT



Sketch-map showing route of expeditions, and positions of 'Grassy Valley' (G.V.) and 'Camp 49' (C. 49). Reproduced by permission of the Editor of the *Geographical Journal*.

towards the southern edge of the desert, viz. polished axes of diorite of the type that seems to be peculiar to the south Libyan Desert,¹ fragments of ostrich shell, sherds of incised pottery, etc. There were also many animal bones and heaps of ash, indicating past habitation of the depression. The skull and the other remains are not, of course, in a proved association, but there is a strong probability that they are contemporary. There is virtually no stratification in these desert sites; the sand-charged wind is gradually planing off the desert surface, and all objects are lowered with it. Two burials may be little to theorize on, but it does seem that what I may call the Wādi Hāwa culture is of a date much earlier than the Meroitic one to which it has hitherto been the tendency to assign it,² largely owing to the admitted similarity of the Wādi Hāwa pottery to that found at Meroë. Stone axes are not found at Meroë, and the only axes found in Egypt at all similar to those from the Wādi Hāwa come from the lowest levels at Coptos and are of Predynastic or early Dynastic date.³ At Camp 49 we have a Predynastic burial in apparent association with Wādi Hāwa material, and another probable Predynastic burial in Grassy Valley, 80 miles to the N.W. Moreover, we found a few more contracted burials on the banks of the wady itself. Finally, to support the settlements indicated by the Wādi Hāwa sites the climate would have had to be a good deal more genial than it is to-day, and this is more likely to have been the case in Predynastic times than during the first centuries A.D.

The burials in Grassy Valley and at Camp 49 are respectively 300 and 200 odd miles due west of the Nile. The only other Predynastic burial far from the Nile Valley of which I am aware is that found near the Red Sea coast in Lat. 24° 59' by Mr. G. W. Murray.⁴

In the preparation of these notes I have received much help and advice from Mr. O. H. Myers.

	Skull from Camp 49.	Typical predynastic skull. ²
	mm.	mm.
Maximum length . . .	173	172
Biparietal breadth . . .	125	132
Minimum frontal diameter . . .	91	87
Bigonial diameter . . .	—	118
Nasal length . . .	22 (est.)	22
Facial length . . .	65	64
Cephalic index . . .	75	77

¹ *Antiquity*, 2, 275.

² *Sudan Notes and Records*, 7, 43 ff.

³ Petrie, *Prehistoric Egypt*, 24.

⁴ *Man*, 23, [129].

⁵ No. 16049 in the Royal College of Surgeons Museum.

THE DEMOTIC GROUP FOR 'SMALL CATTLE'

By CHARLES F. NIMS

THE demotic group for 'small cattle' has been taken as a descendant of the Middle-Egyptian *ꜥwt*, Late-Egyptian *ꜥwt*.¹ I had felt for some time that there were orthographical difficulties in such an equation, and new materials for study led me to collect the occurrences of this group, which I have arranged on the accompanying table in chronological order.²


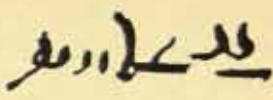
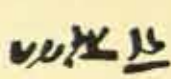
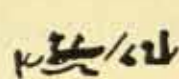
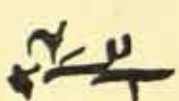
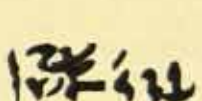
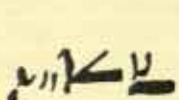
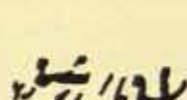
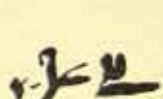
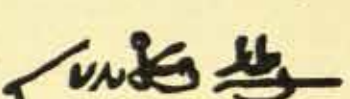

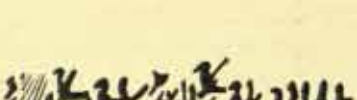
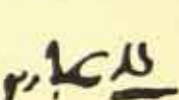
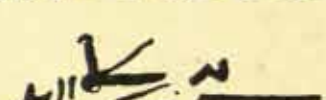
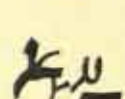
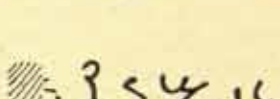
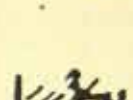
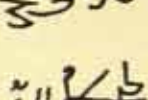
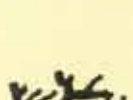
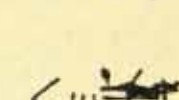
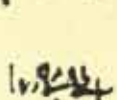
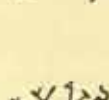
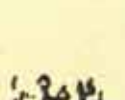
It will be noted that in only four examples (or rather five, for 18 represents two occurrences) is the writing definitely equivalent to the Late-Egyptian *ꜥwt*. The first three of these, 14, 15, and 16, fall into one group; they belong to the obscure phrase *nꜥ hꜥꜥwt ꜥwt* which occurs in documents for the regulation of the cult.³ There is some question as to the meaning of this word here; both 'small cattle' and 'office' have been suggested, but the demotic word for the latter elsewhere shows the *ꜥwt*-sign alone.

¹ Griffith, *Rylands Papyri*, 334.

² The tracings are from the published facsimiles except where noted. The sources of this table are as follows: (1) B. M. 10120, B. 4, year 5 of Darius, 516 B.C.; Reich, *Papyri juristischen Inhalts in Wien. Akad. Denk.*, 55 (1914), 3. Abh., Taf. vi, earlier published as Anastasi 1054 in *Trans. Soc. Bibl. Arch.* 8 (1885), Pls. to pp. 20 ff. (2) Rylands IX, 24, 9, subsequent to year 9 of Darius, 512 B.C.; Griffith, *Rylands Papyri*, Pl. xvi. (3) Rylands X, 3, year 2 of Alexander the younger, 315 B.C.; Griffith, *op. cit.*, Pl. xlviii. (4) Rylands XI, A. 1, year 21 of Soter I, 284 B.C.; Griffith, *op. cit.*, Pl. I. (5) Rylands XI, B. 1; Griffith, *ibid.* (6) Rylands XI, C. 1; Griffith, *ibid.* (7) Rylands XI, D. 1; Griffith, *op. cit.*, Pl. lii. (8) Rylands XI, E. 1; Griffith, *ibid.* (9) Demotic Chronicle, 5. 15, early Ptolemaic; Spiegelberg, *Die sogenannte demotische Chronik (Demotische Studien VII)*, Pl. iv. (10) Papyrus Lille 16. 9, year 35 of Philadelphus, 248 B.C.; Sottas, *Papyrus demotiques de Lille I*, Pl. v. Cf. other examples in Lille 12-20, of which 18. 8 and 19. x+6 are the clearest on the plates. (11) I Khamwas 3. 36, and (12) I Khamwas 4. 1, about year 15 of Euergetes I, 233 B.C.; from hand-facsimile by Prof. Edgerton. Cf. Spiegelberg, *Die demotischen Papyrus II* (Cairo Cat. Gén.), Pls. xlv, xlv. (13) Leiden 381. 2, reign of Euergetes I, 226/5 B.C. (so Spiegelberg, *Demotische Papyri, Veröffentlichungen aus den badischen Papyrus-Sammlungen*, Heft 1, p. 38); Leemans, *Mon. Ég. à Leide*, Pl. cxxiii. (14) Cairo 30605. 6, year 25 of Philometor, 157/6 B.C.; Spiegelberg, *Die demotischen Papyrus II*, Pl. xi. (15) Cairo 30606. 7, year 24 of Philometor, 158/7 B.C.; Spiegelberg, *op. cit.*, Pl. xii. (16) Cairo 31179. 7, year 34 of Philometor, 148/7 B.C.; Spiegelberg, *op. cit.*, Pl. cxviii. (17) Michigan 4536 A, 2. 3, year 6 of Epiphanes, 197 B.C.; from a photograph in my possession, collated with the original. (18) Cairo 30607. 3, year 42 of Euergetes II, 129/8 B.C.; Spiegelberg, *op. cit.*, Pl. xvi. Cf. Cairo 30608. 2, 3, year 49 of Euergetes II, 122/1 B.C.; Spiegelberg, *op. cit.*, Pl. xvii. The tracing is from the first, with some restoration from the second, which is written by the same scribe. (19) Michigan 4244, 3 b. 2, reign of Euergetes II; from a photograph in my possession, collated with the original. This fragment is badly rubbed, and in my tracing I have made small restorations where they are certain. (20) Michigan 624. 3, year 7 (?) of Tiberius (?), 21 (?) A.D.; from a photograph in the possession of Prof. Edgerton, collated with the original. This photograph was in the possession of Prof. Spiegelberg shortly before his death, and I have made use of a few notes which he had made. Credit is given where these are used. A portion of the Greek docket of this papyrus was published by Boak in *J.E.A.* 12 (1926), 107. (21) Pamonthes 1. 35, year 10 of Nero, 63 A.D.; Lexa, *Das demotische Totenbuch*, Pl. i. (22) Mythus 3. 9, first to third century A.D.; Spiegelberg, *Der ägyptische Mythos vom Sonnenauge*, Pl. ii. (23) Magic xi. 18, sim. Magic xx. 31, third century A.D.; Griffith and Thompson, *The Demotic Magical Papyrus II*, Pls. xi, xx.

I am indebted to Prof. Edgerton for the use of his photograph of Michigan 624, and particularly for access to Spiegelberg's manuscript Demotic Dictionary, from which come a large number of the above references. The Michigan papyri 4526 and 4424 belong to a group which I hope to publish in the near future.

³ A similar example is found in Lille 29. 6; Sottas, *op. cit.*, Pl. xvi.

- | | | | |
|----|---|----|---|
| 1 |  | 13 |  |
| 2 |  | 14 |  |
| 3 |  | 15 |  |
| 4 |  | 16 |  |
| 5 |  | 17 |  |
| 6 |  | 18 |  |
| 7 |  | 19 |  |
| 8 |  | 20 |  |
| 9 |  | 21 |  |
| 10 |  | 22 |  |
| 11 |  | 23 |  |
| 12 |  | | |

The other example, 18, bears more closely on our problem. It comes from alimentary contracts from Tebtunis, occurring in the lists of property. When published the reading was not clear; Spiegelberg transliterates . . . *inwt nb inwt nb* in both documents.¹

The reading of the first word of this group is made clear by a later alimentary contract from Tebtunis, Michigan 624 (example 20). The list of property is, apart from this group, exactly parallel to the Cairo documents. At the end of the preserved line occurs the group for 'small cattle', the first word being composed of the *tp* sign plus the *p* as phonetic complement,² giving the value *tp (n) inwt* for the group. In the missing portion of the line there is just room (the restoration of other lines makes the space certain) for *nb inwt*, with the second *nb* beginning line 4. There seems little doubt that this restoration is correct; in any case it supplies the value *tp* for the first word in the group from the Cairo documents, example 18. The distinction between *tp (n) inwt* and *inwt* is not clear; probably the latter is due only to the dim memory of the scribe that there was an older expression as well as the one which will be shown to have been in current use.

Having established the reading *tp (n) inwt* for 18 and 20, it becomes clear that in the other examples the scribes are attempting to express the same value. 1-8, 11-13, 17, 21-3 all show the reading *tp n inwt*, 9 and 10 omit the *n*.³ The reason for the sporadic occurrence of the stroke across the *n*⁴ is obscure; however, this does not invalidate the argument.⁵

Should there remain any question as to the correctness of the reading *tp n inwt* for the demotic group for 'small cattle', it should be completely answered when it is pointed out that this is unquestionably the correct etymology of the Coptic word for 'beast', **ⲧⲏⲛⲏ** (sing.), **ⲧⲏⲛⲟⲩⲥ** (plur.),⁶ and that there is no Coptic descendant of the single word *inwt* in the meaning of 'animal'.⁷

By the Coptic period this word was used with the general meaning of 'domestic animal', and it is quite probable that this lack of definiteness extends back to earlier times. In the demotic alimentary contracts it occurs in the property-list after the ox and ass; in some instances it is combined with *dw* to refer to 'wild' animals.⁸ However, in Papyri Lille 12-20⁹ it retains the older and specific meaning of 'small cattle'.

In tracing the ancestry of this group to earlier periods, I have collected several examples, though I cannot claim that the list is exhaustive. *Wb.* iv, 276. 4, gives *tp n ut*. For *tp n inwt* the best-known hieratic example is in the *Doomed Prince*, 5. 2.¹⁰ It also occurs in Papyrus

¹ *Die demotischen Papyrus I* (Cairo Cat. Gén.), 30, 32.

² Spiegelberg had made this reading in his notes.

³ This reading of course disposes of the difficulty of the supposed masculine article *pr* in example 10. Cf. Sottas, *op. cit.*, 38, § 12.

⁴ In 3, 6, 11, 12, 17, 21, 22. It should be noted that this stroke occurs in two of the witness copies of Rylands XI, but not in the other two or in the original.

⁵ It must be observed that in some Roman documents there is a descendant of the old *ut*. Cf. Pamonthes 2. 16, 18, 21 (Lexa, *op. cit.*, Pl. ii) and Pap. Krall, J. 30 (Krall, *Demotische Lesestücke II*) where the form *ut* occurs. Bearing the god determinative, it has the special meaning of a sacred animal.

⁶ The Sa'idic forms. For the other dialectal spellings of this word cf. Crum, *Coptic Dictionary*, 400. Spiegelberg once proposed the derivation of the Coptic word from *wndw* by metathesis (*Orakel Glos.*, 68), but this was refuted by Gunn, *Studies in Egyptian Syntax*, 92, n. 3. I owe the latter reference to Prof. Edgerton.

⁷ *inw* 'praise' has the descendant **ⲉⲟⲟⲩ**; cf. Crum, *op. cit.*, 62; Spiegelberg, *Koptisches Handwörterbuch*, 31.

⁸ Alimentary contracts, examples 1, 3-8, 13, 17-20; with *dw*, 9, 11, 22. In Pamonthes, example 21, it replaces the older *inwt* of the hieratic *Book of the Dead*.

⁹ Cf. note 2, (10), above.

¹⁰ Harris 500, verso; Budge, *Facsimiles of Egyptian Hieratic Papyri* second series, Pl. xlix.

Harris 501, xi. 4,¹ and in a magical papyrus in the Turin collection.² For hieroglyphic examples there are the occurrences in the Abydos decree of Seti I at Nauri,³ and one from a fragment of a similar decree at Elephantine,⁴ probably of Ramesses III.

In the hieratic examples the usual translation is 'choicest of animals'; of the examples in the Abydos decrees various translations have been given,⁵ but it seems probable that in these cases, at least, the group had already come to be treated as one word, and to have the general meaning of 'animal' as it had in later periods.

It is quite clear, I believe, that in Late Egyptian the phrase *tp n iwt* may have been understood as one word, and that certainly in the demotic documents the group usually read as *iwt*, *iwt*, represents this phrase; the scribe endeavouring to represent the word which appears in the Coptic *ⲧⲃⲏⲛ*, *ⲧⲃⲏⲕⲟⲟⲩⲉ*.⁶

¹ Budge, *Facsimiles of Egyptian Hieratic Papyri* (1910), Pl. xxix.

² Pleyte and Rossi, *Papyrus de Turin*, Pl. 124. 10.

³ Griffith, *J.E.A.* 13 (1927), Pls. xli, xlii, ll. 35, 57, 58, 75. I owe this reference to Spiegelberg's notes.

⁴ De Morgan, *Cat. des Mon.* i, 118, C. 5.

⁵ Griffith, *op. cit.*, pp. 201 ff., 207, and references there.

⁶ Since submitting this article I had occasion to visit the Cairo Museum, and there noted a probable occurrence of the demotic group for 'small cattle' in Cairo 30601, the first group in line 2. Cf. Spiegelberg, *Die demotischen Papyrus II*, pl. i.

BIBLIOGRAPHY: GRAECO-ROMAN EGYPT

PAPYROLOGY (1935)

The work is divided as follows:

- § 1. Literary Texts. H. J. M. MILNE, British Museum, London, W.C. 1.
- § 2. Religion, Magic, Astrology (including texts). A. D. NOCK, Eliot House, Harvard University, Cambridge, Mass., U.S.A.
- § 3. Publications of non-literary texts. T. C. SKEAT, British Museum, London, W.C. 1.
- § 4. Political History, Biography, Administration, Topography and Chronology. J. G. MILNE, 23 Belsyre Court, Woodstock Road, Oxford (Ptolemaic and Graeco-Roman Periods), and N. H. BAYNES, Fitzwalters, Northwood, Middlesex (Byzantine and Arab Periods).
- § 5. Social Life, Education, Art, Economic History, Numismatics and Metrology. J. G. MILNE (Ptolemaic and Graeco-Roman), and N. H. BAYNES (Byzantine and Arab).
- § 6. Law. Prof. H. F. JOLOWICZ, University College, Gower Street, London, W.C. 1.
- § 7. Palaeography and Diplomatic. T. C. SKEAT.
- § 8. Lexicography and Grammar. R. MCKENZIE, 10 Museum Road, Oxford.
- § 9. General Works, Bibliography, General Notes on Papyrus Texts. T. C. SKEAT.
- § 10. Miscellaneous, Excavations, Personal. T. C. SKEAT.

The authors wish jointly to express their gratitude to all those scholars who have sent them off-prints of their articles, a kindness which has greatly facilitated the work of compiling this bibliography.

The following abbreviations are regularly used in this Bibliography:

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|---|---|
| <p><i>Abh.</i> = Berlin, München, etc. = <i>Abhandlungen der Preussischen (Bayerischen, etc.) Akademie der Wissenschaften.</i></p> <p><i>Aeg.</i> = <i>Aegyptus.</i></p> <p><i>AJA</i> = <i>American Journal of Archaeology.</i></p> <p><i>Am. Hist. Rev.</i> = <i>American Historical Review.</i></p> <p><i>Am. Journ. Phil.</i> = <i>American Journal of Philology.</i></p> <p><i>Am. Jour. Sem. Lang.</i> = <i>American Journal of Semitic Languages.</i></p> <p><i>Anc. Egypt</i> = <i>Ancient Egypt.</i></p> <p><i>Ann. Serv.</i> = <i>Annales du Service des Antiquités de l'Égypte.</i></p> <p><i>Ann. Univ. Roma</i> = <i>Annuario della R. Università di Roma.</i></p> <p><i>Ἀρχ. Ἐφ.</i> = <i>Ἀρχαιολογικὴ Ἐφημερίς.</i></p> <p><i>Arch. f. Rel.</i> = <i>Archiv für Religionswissenschaft.</i></p> <p><i>Arch. Giurid.</i> = <i>Archivio Giuridico.</i></p> <p><i>Arch. R. u. W.</i> = <i>Archiv für Rechts- und Wirtschaftsphilosophie.</i></p> <p><i>Archiv</i> = <i>Archiv für Papyrusforschung.</i></p> <p><i>Ath. Mitt.</i> = <i>Athenische Mitteilungen.</i></p> <p><i>BCH</i> = <i>Bulletin de correspondance hellénique.</i></p> <p><i>B.M. Quarterly</i> = <i>British Museum Quarterly.</i></p> <p><i>BZ</i> = <i>Byzantinische Zeitschrift.</i></p> <p><i>Boll. fil. class.</i> = <i>Bollettino di filologia classica.</i></p> | <p><i>Bull. Acad. Sci. URSS.</i> = <i>Bulletin de l'Académie des Sciences de l'Union des Républiques Soviétiques Socialistes: Classe des Sciences Sociales.</i></p> <p><i>Bull. Ist. Dir. Rom.</i> = <i>Bulletino del Istituto di diritto romano.</i></p> <p><i>Bull. J. Ryl. Libr.</i> = <i>Bulletin of the John Rylands Library.</i></p> <p><i>Bull. Soc. Arch. d'Alex.</i> = <i>Bulletin de la Société Royale d'Archéologie d'Alexandrie.</i></p> <p><i>Bursian</i> = <i>Jahresbericht über die Fortschritte der klassischen Altertumswissenschaft.</i></p> <p><i>Byz.-neogr. Jahrb.</i> = <i>Byzantinisch-neugriechische Jahrbücher.</i></p> <p><i>Chron. d'Ég.</i> = <i>Chronique d'Égypte.</i></p> <p><i>Cl. Journ.</i> = <i>Classical Journal.</i></p> <p><i>Cl. Phil.</i> = <i>Classical Philology.</i></p> <p><i>Cl. Quart.</i> = <i>Classical Quarterly.</i></p> <p><i>Cl. Rev.</i> = <i>Classical Review.</i></p> <p><i>Cl. Weekly</i> = <i>Classical Weekly.</i></p> <p><i>Congr. Int. di d. R.</i> = <i>Atti del Congresso Internazionale di diritto Romano, 1933.</i></p> <p><i>Congr. Iurid. Internat.</i> = <i>Acta Congressus Iuridici Internationalis VII Saeculo a Decretalibus Gregorii IX et XIV a Codice Iustiniano Promulgatis. Romae, 12-17 Novembris 1934.</i></p> |
|---|---|

- C.-R. Ac. Inscr. et B.-L. = *Comptes-Rendus de l'Académie des Inscriptions et Belles-Lettres*.
 D. Lit.-Z. = *Deutsche Literaturzeitung*.
 Ét. de Pap. = *Études de Papyrologie*.
 GGA = *Göttingische gelehrte Anzeigen*.
 Harv. Theol. Rev. = *Harvard Theological Review*.
 Hist. Z. = *Historische Zeitschrift*.
 J. Bibl. Lit. = *Journal of Biblical Literature*.
 JEA = *Journal of Egyptian Archaeology*.
 JHS = *Journal of Hellenic Studies*.
 JRS = *Journal of Roman Studies*.
 J. Am. Or. Soc. = *Journal of the American Oriental Society*.
 J. Theol. Stud. = *Journal of Theological Studies*.
 Jahrb. Bayer. Akad. = *Jahrbuch der Bayerischen Akademie der Wissenschaften*.
 Jahrb. f. Lit. = *Jahrbuch für Liturgiewissenschaft*.
 Journ. Rel. = *Journal of Religion*.
 Journ. Sav. = *Journal des Savants*.
 KVGR = *Kritische Vierteljahresschrift für Gesetzgebung und Rechtswissenschaft*.
 LQR = *Law Quarterly Review*.
 Mēl. Beyrouth = *Mélanges de l'Université Saint-Joseph, Beyrouth (Liban)*.
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 NGG = *Nachrichten der Gesellschaft der Wissenschaften zu Göttingen*.
 Num. Chron. = *Numismatic Chronicle*.
 OLZ = *Orientalistische Literaturzeitung*.
 PW = *Pauly-Wissowa-Kroll, Real-Encyclopädie der klassischen Altertumswissenschaft*.
 Phil. Woch. = *Philologische Wochenschrift*.
 Rech. sc. relig. = *Recherches de science religieuse*.
 Rendic. Pont. Acc. = *Atti della Pontificia Accademia Romana di Archeologia (Serie III): Rendiconti*.
 Rev. arch. = *Revue archéologique*.
 Rev. bibl. = *Revue biblique*.
 Rev. critique = *Revue critique d'histoire et de littérature*.
 Rev. de phil. = *Revue de philologie*.
 Rev. d'hist. eccl. = *Revue d'histoire ecclésiastique*.
 Rev. ét. anc. = *Revue des études anciennes*.
 Rev. ét. juives = *Revue des études juives*.
 Rev. ét. gr. = *Revue des études grecques*.
 Rev. ét. lat. = *Revue des études latines*.
 Rev. hist. = *Revue historique*.
 Rev. hist. dr. = *Revue historique de droit français et étranger*.
 Rev. hist. rel. = *Revue de l'histoire des religions*.
 Rh. Mus. = *Rheinisches Museum*.
 Riv. di fil. = *Rivista di filologia classica*.
 Riv. indo-greco-ital. = *Rivista indo-greco-italiana*.
 Riv. Stor. Dir. Ital. = *Rivista di storia del diritto italiano*.
 Sat. Rev. Lit. = *Saturday Review of Literature*.
 Sitzungsber. Berlin, München, etc. = *Sitzungsberichte der Preussischen (Bayerischen, etc.) Akademie der Wissenschaften*.
 St. Albertoni = *Studi in Memoria di Aldo Albertoni*.
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 St. Riccobono = *Studi in onore di Salvatore Riccobono*.
 Stud. et Doc. = *Studia et Documenta Historiae et Iuris*.
 Symb. Frib. Lenel = *Symbolae Friburgenses in honorem Ottonis Lenel*.
 Symb. Oslo. = *Symbolae Osloenses*.
 Trans. Am. Phil. Ass. = *Transactions of the American Philological Association*.
 Theol. Lit.-Z. = *Theologische Literaturzeitung*.
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 Tijdschrift = *Tijdschrift voor Rechtsgeschiedenis*.
 Tüb. Beitr. z. Alt. = *Tübinger Beiträge zur Altertumswissenschaft*.
 Würzb. Stud. z. Alt. = *Würzburger Studien zur Altertumswissenschaft*.
 Z. f. kath. Theol. = *Zeitschrift für katholische Theologie*.
 Z. f. Kirchengesch. = *Zeitschrift für Kirchengeschichte*.
 Z. f. Numism. = *Zeitschrift für Numismatik*.
 Z. f. vergleich. Rechtsw. = *Zeitschrift für vergleichende Rechtswissenschaft*.
 Z. neut. Wiss. = *Zeitschrift für neutestamentliche Wissenschaft*.
 Z. Sav. = *Zeitschrift der Savigny-Stiftung (Romanistische Abteilung)*.
 ZDMG = *Zeitschrift der deutschen morgenländischen Gesellschaft*.

1. Literary Texts

A. GENERAL

Vol. XI of the PSI, nos. 1182-1222, incorporates the now famous fragments of Gaius, Aeschylus, Cratinus, Eupolis, Sophron, and Callimachus, and contains besides fragments of Homer, Hesiod, Sophocles (*Oed. Rex*), Euripides (*Phoenissae*), Aristophanes (*Thesmophoriazusae*), Thucydides, Xenophon, Isocrates, Plato, Demosthenes, Ps.-Lyias, Philo, and others.

Vol. v of P. Ross.—Georg. edited by ZERETELI includes a tragic fragment and an astrological treatise. MANTEUFFEL has brought out *Papyri Varsovienses*, including fragments of Xenophon's *Cyrop.*, a mime, and an inventory of books, all already published by him.

KÖRTE has issued a new instalment of his *Literarische Texte* in *Archiv* 11, 220–83.

The remaining literary papyri of Giessen University are published (all save one) by H. EBERHART in vol. IV of *Schriften der Hessischen Hochschulen*. Most are of early date but very fragmentary. One is a dialogue on the *Odyssey* (by Aristotle?) with a participant called Theophanes, as in *Brit. Mus. Lit. Pap.* 160.

In the Gilbert Murray presentation volume, *Greek Poetry and Life*, are several items of papyrological interest: PICKARD-CAMBRIDGE on the *Niobe*, 106–20; LOBEL editing a new tragic fragment, 295–8; T. F. HIGHAM on Teliambi, 299–324; BOWRA on Erinna (PSI 1090), 325–42; E. A. BARBER on the *Lock of Berenice*, 343–63.

Vol. I of the *Papiri Milanesi*, 1935, includes a Commentary to an epic poem of Antimachus.

WIFSTRAND edits seven items from the papyri in Lund University Library, including *Il. vi*, Isocrates *ad Dem.*, Thucydides, New Comedy, in *Kunl. Human. Vet. i Lund, Årsberättelse* (1934–5), 53–65.

B. EPIC, ELEGIAC, AND IAMBUS

The new Callimachus material continues to excite comment. LOBEL, in *Hermes* 70 (1935), 31–45, reconstitutes various parts of the *Aitia* and republishes the trochaic trimeters in P. Oxy. 1011, fol. vii. In *Athenaeum* 13 (1935), 101–12, LENCHANTIN writes on the *Aitia* and other poems. ROSTAGNI in *Gnomon* 11, 306–8, criticizes PFEIFFER's views. KÖRTE in *Hermes* 70, 120, restores *Diegeseis* col. 4, 23 ff. STROUX in *Philologus* 44 (1935), 301–19, discusses various points in the *Diegeseis*. E. ORTH in *Phil. Woch.*, 1935, 591, restores a line in *Dieg.* col. 5. COPPOLA makes use of the new material in his *Cirene e il nuovo Callimaco*, Bologna, 1935. In *Riv. di fil.* 13 (1935), 168–79, LENCHANTIN discourses on *Callimaco, l'acqua Filetea, e Properzio III. 3*. *Ibid.*, 289–302, G. DE SANCTIS writes on Horatius Cocles in reference to *Diegeseis*, col. 5, 26 ff. CAHEN sums up the situation in *L'œuvre poétique de C.: Documents nouveaux* in *Rev. ét. gr.* 48 (1935), 279–321. LAVAGNINI writes on the end of the *Aitia* in *Stud. ital. di fil. class.* 12 (1935), 111–16, and makes observations on the *Iambi* in *Atti R. Accad. di Palermo* 19 (1935), fasc. 3. In *Philologus* 44 (1935), M. POHLENZ finds parallels for *Der Römer Gaius bei Kallimachos*. A. ARDIZZONI writes on *Heracles and Theodamas in Callimachus and Apollonius Rhodius* in *Riv. di fil.* 13 (1935), 452–67.

The new Euphorion is dealt with by LOBEL in *Riv. di fil.* 13 (1935), 1–2, and by MAAS in *Gnomon* 11 (1935), 102–4. K. LATTE writes on *Der Thrax des Euphorion* in *Philologus* 44 (1935), 129–55, and F. PFISTER, in *Phil. Woch.*, 1935, 1357–60, would identify the poem as from the *Χλωιδες*. In *Rendiconti R. Istit. Lombardo* 68 (1935), 1–8, L. CAZZANIGA seeks to run down the mythological allusions.

In the *Brit. Mus. choliambics*, Inv. no. 155 verso, l. 15, the reading ἡ δὲ γῆ πλωτή should be compared with the formula quoted in ROHDE, *Psyche* (Engl. transl., p. 553): τούτω μὴ γῆ βατή, μὴ θάλασσα πλωτή.

C. H. ROBERTS gives a preliminary discussion of a Juvenal vellum fragment, vii. 149–98, c. A.D. 500 found at Antinoë, in *Aeg.* 15, 297–302.

NORSA and VITELLI publish in *Stud. ital. di fil. class.* 12 (1935), 87–91, a fragment from a mythological poem.

C. LYRIC

BOWRA has edited Pindar for the *Oxford Texts*, and has published *Greek Lyric Poetry from Alcman to Simonides*, 1936. DIEHL is bringing out a new edition of his *Anthologia Lyrica*, of which the Lesbian poets have already appeared, including (p. 227) a new scrap of Alcaeus from Heidelberg. BOWRA in *Hermes* 70, 238–41, makes restorations in Alcaeus and Sappho. In *Cl. Quart.* 30 (1936), 10–15, D. L. PAGE argues for the authenticity of Sappho *ḡ* 2.

In *Aeg.* 15 (1935), 282–96, G. ZUNTZ edits P. Berol. 13411. He queries Simonides or Bacchylides. Actually it is Pindar.

CRÖNERT, in *Symb. Oslo.* 14 (1935), 126–33, identifies a quotation in P. Vind. 19996 as from the *Ulysses* of Timotheus.

BOGNER reports on the literature upon Pindar and Bacchylides, 1928–33, in *Bursian* 251 (1936).

With reference to DIEHL's text of Sappho we offer the following remarks. In frag. 68, ll. 1–2, οἶθεν suggests that a proper name has fallen out, presumably Sappho's bugbear Andromeda, the lady who in frag. 70 does not know how to wear her clothes, and who is doubtless, to judge by the form of their names, the daughter of Polyanax in frag. 86. Read *μαρμαρίνα οἶθεν* | *ἔσσετ(αι)*, *Ἀνδρόμεδ(α)*, εἰς ὄσπερον. In frag. 88 the last word has dropped through haplography, and the line should run: *τί σὺ, Πανδίωνι, μ(αι) ὦ (ἐ)παννα χελιδος*

«καλάδρησθα». In *Φαίνεται μοι*, l. 9, καμ . . . πένταγε would describe the sensation of speechlessness as expressed by the Greeks, cf. βοῦς ἐπὶ γλώσσῃ μέγας. We rather reverse the sensation, and think of the tongue cleaving to the palate. κατέαγε, a purely metaphorical, dead expression, is quite out of place in the intensely sensational surroundings. In α 11, l. 10, VOGLIANO has suggested to me to read Γύγ]γυλά π[ρόφ]ανθι, thus lengthening α by position and properly filling the gap, but the form φάνθι for φάνθη seems as yet unexampled. In α 5, ll. 12-13, we should read [κῆρον ἰδοι]σαν | [αἰψ' or ῥῆ' "Ἐρος γν]άμπρον. In frag. 52 read μέσα δέ | νύκτος προτιέρχε(αι) ὥρα, instead of the prosaic μέσαι νύκτες and the dubious use of ὥρα.

D. DRAMA

The *Ichneutae* is dated late by F. R. WALTON in *Harvard Studies in Class. Philology* 46 (1935), 167-89.

R. GOOSSENS dates the *Prospaltioi* of Eupolis to 429 B.C. in *Rev. de phil.* 9 (1935), 333-49, adding a postscript in *Chron. d'Ég.* 10 (1935), 379-80. GOOSSENS and CLAIRE PRÉAUX place some more fragments of the *Ploutoi* of Cratinus, and the former dates the play to 436 B.C. in *Rev. ét. anc.* 37 (1935), 401-34.

C. H. ROBERTS gives new readings of the *Antiope*, *Cretans*, and *Melanippe* in *Cl. Quart.* 29 (1935), 164-7.

In *Rendiconti R. Instit. Lombardo* 68 (1935), 433-8, CAZZANIGA finds the influence of the *Medea* on the *Tereus* of Sophocles.

T. KALÉN writes in *Eranos* 33 (1935), 39-62 on the *Myrmidons* fragment.

E. HUNDT edits two mimes of Herodas, the *Didaskalos* and the *Asklepiasusae* (F. SCHÖNINGH, *Samml. altsprachl. Lesehefte*, Reihe 2, Heft 6, 1935).

KÖRTE republishes, in *Hermes* 70, 431-8, the new fragment of Menander's *Theophoroumene* along with others previously known.

CALDERINI publishes in *Aeg.* 15 (1935), 239-45, the opening lines, 1-16, of the prologue of the *Telephus* from a Milan papyrus. LAVAGNINI writes on *Virgilio, Teocrito e Sofrone* in *L'Antiquité classique* 4 (1935), 153-5. Sophron is also the subject of a study by M. PINTO-COLOMBO, *Il mimo di Sofrone e di Senarco*, Florence, 1934, and of an article by C. KERÉNYI, *Sofrone, ovvero il naturalismo greco* in *Riv. di fil.* 13 (1935), 1-19.

E. HISTORY

In *Riv. di fil.* 13 (1935), 180-213, G. DE SANCTIS writes on *La Storia di Eforo e le Elleniche di Teopompo*.

G. L. BARBER, *The Historian Ephorus*, 1935, devotes ch. 3 to the *Hellenica Oxyrhynchia*.

F. ORATORY

In *Symb. Oslo.* 14 (1935), 68-72, G. BJÖRCK publishes P. Ups. 114, from a papyrus codex of Isocrates *Ad Nic.*, 3-4 cent. Fragments of a political speech are edited by A. PEROSA among the items in *Da Papiri della Società Italiana, Stud. ital. di fil. class.* 12 (1935), 92-110.

G. ROMANCE

ZIMMERMANN has now published the fruits of his long study of romance papyri in *Griechische Roman-Papyri und verwandte Texte*, Heidelberg, 1935. In addition he has written a series of separate articles on various texts, viz.: *Die stumme Myrto* in *Phil. Woch.* 1935, 474-80, on PSI 1177 (Antonius Diogenes); *ibid.*, 1211-6, *Lukians Toxaria und das Kairener Romanfragment* (PSI 981); *Neues zum Metiochos-Parthenope Roman* (P. Oxy. 435) in *Philologus* 44, 194-205; *Papyrologisches und Philologisches zu P. Berol. 7927, Metiochos-Parthenope Roman A* in *Aeg.* 15 (1935), 405-414; *Aus der Welt des griech. Romans in Die Antike* 11 (1935), 292-316; *Ein Nachwort zu P. Berol. 9588* (Metiochos-Parthenope romance) in *Aeg.* 15, 277-81. Moreover, in *Archiv* 11, 165-88, ZIMMERMANN has corrected the attribution of various 'verkannte Papyri', hitherto posing as romances, the most interesting being P. Oxy. 416, now recognized as Arrian's *Ταλθύβορου βίος*.

2. Religion, Magic, Astrology

(Including Texts)¹

A. GENERAL

All of us can profit from STITH THOMPSON, *Motif-Index of Folk-Literature*, pts. 1-4 (University of Indiana Studies XIX nos. 96-7; XX nos. 100, 101; XXI nos. 105-6=FF. Communications 106-9; 1932-4) a magni-

¹ References given between single quotation-marks, or in the form 'I have been sent references to . . .' are taken from the excellent card-bibliography of the Fondation Égyptologique Reine Élisabeth of Brussels.

ficient repertory arranged in a most practical way (rev. by R. FICK, *GGA* 197 (1935), 460-8); H. J. ROSE, *Concerning Parallels; The Frazer Lecture 1934* (pp. 23, Oxf., 1934: of great methodological importance and wisdom), *Mythology and Pseudomythology* (*Folklore* 1935, 9-36: p. 33, remark on *Plut. Is. Os.* p. 363 D as anti-Jewish), *Numen inest*; 'Animism' in *Greek and Roman Religion* (*Harv. Theol. Rev.* 28 (1935), 237-57); E. BICKERMANN, *À propos de la phénoménologie religieuse* (*Rev. ét. juives* 99 (1935), 92-108: note p. 101 as parallel to an interesting magical form).

For older Egypt, we have A. ERMAN's completely rewritten *Die Religion der Ägypter* (de Gruyter, Berlin, 1934: pp. xvi+465: R.M. 7. 50); ALAN H. GARDINER's fundamental and eminently original *The Attitude of the Ancient Egyptians towards Death and the Dead* (C.U.Pr. 1935, pp. 45, 2s.); H. RANKE, *The Origin of the Egyptian Tomb Statue* (*Harv. Theol. Rev.* 28 (1935), 45-53); P. MONTET-P. BUCHER, *Un dieu cananéen à Tanis: Houroun de Ramsès* (*Rev. Bibl.* 44 (1935), 153-65); M.-R. SAVIGNAC-G. HORSFIELD, *Le temple de Ramm* (*ibid.* 245-78: baetyl and fragment of statue, perhaps Tyche, with serpent); review of MOND-MYERS, *The Bucheum*, by G. ROEDER, *Egyptian Religion* 3 (1935), 230-4; publication in *AJA* 29 (1935), 1 ff. of a statue of Horus dedicated by Nektanebos and supposed to have been meant to decorate the tomb of a Mnevis which died during his reign.

On the interrelations of the West and the Near East, we have P. DIKAIOS, *A hoard of silver Cypriot slaters from Larnaca* and E. S. G. ROBINSON, *Notes on the Larnaca hoard* (*Num. Chron.*, 5th ser. 15 (1935), 165-90; 4 pl.: types include a solar goddess, known in N. Syria); J. BIDEZ, *L'Atlantide* (*Bull. acad. roy. Belg., classe des lettres*, 1934, 101-26; Atlantis nominally in W., but picture based on E.); G. GIANNELLI's remarks on the significance of the Persian War in *Luci ed ombre di un' antica alleanza di guerra (Atene e Roma*, 3rd ser. 2 (1934), 99-116); C. CLEMEN, *Die Religion der Etrusker* (*Forsch. u. Fortsch.* 12 (1936), 34); W. WEBER, *Der alte Orient* (30 pp. offprinted from *Der Orient und Wir*, written in collaboration with Schaefer, Kühnel, Lüders, O. Frank, Kümmel: interesting, e.g. p. 8 on the nexus of water and life in religious ideas); A. ROES, *New Light on the Grylli* (*JHS* 55 (1935), 232-5); G. M. A. HANFMANN, *Eine syrische Bronze-statuetten in Berlin* (*Arch. Anz.* 1935, 49-58; interesting discussion of imports by a scholar of whom we may hope much); G. RUDBERG, *Zur Diogenes-Tradition* (*Symb. Oslo.* 14 (1935), 22-43: interesting remarks, p. 34, on formation of the Gospels); FR. DORNSEIFF, *Homerphilologie* (*Hermes* 70 (1935), 241-4); a wonderful review by N. H. BAYNES of VOGT-KORNEMANN, *Römische Geschichte* in *JRS* 25 (1935), 81-7; B. ROWLAND, *Ionic architecture in the East* (*AJA* 39 (1935), 489-96: p. 494 f. on Zoroastrian fire-temple in India, perhaps earlier than 1st cent. B.C.). For the kindred question of *interpretatio Romana* cf. F. M. HEICHELHEIM, *Genii cucullati* (*Archaeologia Aeliana*, 4th ser. 12 (1935), 187-94: p. 193 on Harpocrates).

An excellent and most usefully documented survey is afforded by A.-J. FESTUGIÈRE-P. FABRE, *Le monde gréco-romain au temps de Notre Seigneur* (2 vols. in *Bibl. cathol. des sciences religieuses*: Bloud et Gay: Paris, 1935. Note I, 87 ff. on religious education in antiquity; II, 1-34 on Imperial cult, 89 f. on religious rock-reliefs at Philippi, 137 ff. on Isiac mysteries, 185 ff. on the qualities regarded by the ancients as virtues and vices). The more elaborate work by A.-J. FESTUGIÈRE, *L'idéal religieux des Grecs et l'Évangile*, préface par le R. P. M.-J. LAGRANGE (2e ed. Gabalda, Paris, 1932, pp. 340, 60 frs.) is now available to me: a notable study of the personal religion of antiquity, fair-minded, well-informed, and sympathetic. The excursus on the religious value of the magical papyri deserves particular attention, and so does that on the use of Aristotle in patristic literature. FESTUGIÈRE has given us also *Les mystères de Dionysos* (pp. 50: reprinted from *Rev. Bibl.*, avril et juillet 1935: learned and thoughtful, and relevant to the mysteries of Isis). M. P. NILSSON, *Early Orphism and kindred religious movements* (*Harv. Theol. Rev.* 28 (1935), 181-230) is a wonderful study of the genesis of ideas which continued vital throughout the Graeco-Roman period. W. K. C. GUTHRIE's *Orpheus and Greek Religion* is praised, as it deserves to be, by O. KERN, *Gnomon* 11 (1935), 473-8 (note p. 475 on fate), and H. J. ROSE, *JHS* 55 (1935), 259-61 (where he reviews also A. KRUEGER, *Quaestiones Orphicae*). From NILSSON we have further *Die eleusinischen Gottheiten* (*Arch. f. Rel.* 32 (1935), 79-141), a contribution of outstanding importance (note p. 122 f. on the Demeter festival at Alexandria); a review of FR. ALTHEIM, *Römische Religionsgeschichte* II, III in *D. Lit.-Z.* 1935, 489-94; one of WALTER F. OTTO, *Dionysos, Mythos u. Kultus in Gnomon* 11 (1935), 177-82, which is both a moving protest against romanticism in our studies and a wise statement of the scope and limitations of the history of religion; and an article, *The triumphal arch and town planning* (*Acta Instituti regni Sueciae* 4 (1935) 120-8), which banishes from consideration some unnecessary and hitherto unjustified assumptions of religious motives (note also p. 128, on the way in which the Western provinces received Roman influence).

We may notice also S. EITREM, *Heroen der Seefahrer* (*Symb. Oslo.* 14 (1935), 53-67), mainly concerned with Attic material and as illuminating as all his work (note p. 61 n. 1 on the procession of a deity in a ship);

- M. TIERNEY, *The Parados in Aristophanes' Frogs* (*Proc. R. Irish Acad.* 42, Sect. C (1935), No. 10, 199-218: sep. la.), arguing that the ceremony which Ar. has in mind is the Lenaea and not the Eleusinian mysteries (I am inclined to think that the chorus is a general description of the ideal life hereafter for Eleusinian initiates, which would naturally take Dionysiac features also), and making instructive comments on the Gurob liturgical papyrus; W. E. BLAKE, *Modal Uses in Chariton* (*Am. J. Phil.* 57 (1936), 10-23) for the observation p. 15 f. on *ba* after *réxη* and fatalistic expressions; H. HERTER, *Nemesis* (*PW* 16, 2337-80), full and sensible; F. R. WALTON, *A problem in the Ichneutae of Sophocles* (*Harv. Stud. class. phil.* 46 (1935), 167-89), bearing on the cult of Asclepius and methodically important; the observation of C. BRADFORD WELLES, *AJA* 39 (1935), 423-5, in his review of P. GRAINDOR, *Athènes sous Hadrien*, on dedications *κατ' ἐστράτην*; remarks on the antecedents of Mithraism, pp. 152-9 of S. SPIEGEL, *Towards certainty in Ezekiel* (*J. Bibl. Lit.* 54 (1935), 145-71), and in A. CHRISTENSEN, *Die Iranier* (*Kulturgesch. d. alten Orients*, III i, 1933; in W. OTTO's re-edition of IWAN MÜLLER's *Handbuch*); G. KAZAROW, *Neue Mithrasdenkmäler aus Bulgarien* (*Germania* 19 (1935), 24-7), including a dedication by the prefect of a legionary camp; J. L. CASKEY, *New Inscriptions from Troy* (*AJA* 39 (1935), 588-92), including a text, perhaps of the beginning of the second century A.D., about a benefactor who gave a number of bulls for *taurobolia*, i.e., I presume, the performance of the type of the *ταυροκαθάρσια* commonly postulated as the source of the Imperial and personally orientated rite familiar in the western half of the Empire; K. LATTE, *Eine Ode des Horaz* (II, 16) (*Philol.* 90 (1935), 294-304), very instructive for the mood of educated men at the beginning of our era; S. DOW, *Monument to the athletic victor Menodoros* (*Hesperia* 4 (1935), 81-90), with valuable account of Hellenistic international festivals; J. H. OLIVER, *Greek Inscriptions* (ib. 1-70), with 61-3 archaizing Imperial dedication for *Ἀγῶν καὶ Κοίτη Παφίης*; CH. JOSSELAND, *L'Âme-Dieu à propos d'un passage du 'Songe de Scipion'* (*L'Antiquité classique* 4 (1935), 141-52), a delicate study of an idea very important in Hellenistic thought; E. S. G. ROBINSON, *A find of coins from Thasos* (*Num. Chron.*, 5th ser. 14 (1935), 244-54), with a curious Abderite Hera with raised arms; L. DEUBNER, *Bemerkungen zu den Text der Vita Pythagorae* (*Sitzungsber. Berlin*, 1935, 612-94; separately, R.M. 5), extraordinarily instructive, and forerunner of a much needed edition; G. RODENWALDT, *Über den Stilwandel in der antoninischen Kunst* (*Abh. Berlin*, 1935, iii; pp. 27 and 10 pl.; sep. R.M. 7.50), a penetrating contribution to Imperial development, like his *Ein attischer Sarkophag in Madrid* (*Anuario del Cuerpo Facultativo de Archiveros, Bibliotecarios, y Arqueólogos* 2 (1934), 5-13), which bears on the *Heroicus* of Philostratus; G. A. S. SNIJDER, *Ein römisches Bronzeporträt aus Aphrodisias* (*La critica d'arte* 1 (1935), 30-3), with good discussion of the island in the third century represented by Gallienus' reign; W. L. WESTERMANN, *Sklaverei* (*PW Suppl.*, VI, 894-1068), a well-executed cross-section of the social history of antiquity; M. L. ROSTOVITZ, *La Syrie romaine* (pp. 40; offprinted from *Rev. Hist.* 175 (1935), a most brilliant and suggestive *aperçu*, and *Dura and the problem of Parthian Art* (*Yale Classical Stud.*, v (1935), 157-304), a richly illustrated study and the finest thing which I have read on the art of the ancient Near East since Cumont's chapter on painting in *Fouilles de Doura-Europos*; A. R. BELLINGER-C. BRADFORD WELLES, *A Third-Century Contract of Sale from Edessa in Osrhoene* (*ibid.* 95-154), an admirable study of a legal document, which throws quite new light on this cultural frontier; F. CUMONT, *Une campagne de Fouilles à Doura* (*Rev. arch.*, 6th. ser. 4 (1934), 173-9), on the *Fifth Report* (itself reviewed by J. JOHNSON, *J. Am. Or. Soc.* 55 (1935), 210-14 and A. M. WOODWARD, *JRS* 25 (1935), 240-2, and—with the *Fourth*—by V. MÜLLER, *AJA* 39 (1935), 630-3); cf. FR. MESSERSCHMIDT, *Die Ausgrabungen in Dura-Europos von Euphrat* (*Theol. St. Kr.* 106 (1934/5) 241-50), with most helpful observations; CLARK HOPKINS, *The Season 1934-35 at Dura* (*AJA* 39 (1935), 293-9), with account of earlier synagogue decorated in geometric designs, under the now famous synagogue; W. TELFER, *A Recently Discovered Inscription by Arab Veterans* (*JRS* 25 (1935), 33-4), for the building of a shrine of unknown type; F. CUMONT, *Adonis et Canicule* (*Syria* 16 (1935), 46-50), with Arab and astrological evidence; J. STROUX, *Aus einem neuen KOMENTAPION griechischer Kurzschrift* (*Philol.* 90 (1935), 78-89), with notes on gnomonic sayings comparable with those of Sانسوس; M. I. FINKELSTEIN, *Εμπορος, Ναύκληρος, and Κάπηλος*; a *Prolegomena to the Study of Athenian Trade* (*Cl. Phil.* 30 (1935), 320-36), important in itself and as illustrating that fluidity of the Greek language of which we must always take account in these studies; G. RADET, *Les idées et les croyances d'Alexandre le Grand* (*J. Sav.*, 1935, 142-52); 'R. D(ussaud), *Note sans titre sur l'état de la question du pèlerinage d'Alexandre à l'Oasis d'Ammon* (*Rev. hist. rel.* 111 (1935), 316-17); reviews of L. DEUBNER, *Attische Feste* by L. ZIEHEN, *GGA* 197 (1935), 449-60, of A. D. NOCK, *Conversion*, by K. LATTE, *ib.*, 111-16, H. LIETZMANN, *JRS* 25 (1935), 107-8, M. L. W. LAISTNER, *Philos. Rev.* 44 (1935), 81-2, and of W. STETTNER, *Die Seelenwanderung bei Griechen und Römern*, J. R. WATMOUGH, *Orphism*, and L. HEERMANN, *Du Golgotha au Palatin* by A. D. NOCK, *Gnomon* 11 (1935), 504-7.

B. CULTS OF GRAECO-ROMAN EGYPT

U. WILCKEN's *Urkunden-Referat* in *Archiv* 11 (1935), contains as always invaluable material, and his *Urkunden der Ptolemäerzeit* II, i (see § 3) puts a study of the *χοαχύρας* on a new footing. A. E. R. BOAK, *Soknopaiou Nesos. The University of Michigan Excavations at Dimê in 1931-32* (Univ. of Michigan Studies, Humanistic Ser., XXXIX (1935); Univ. of Mich. Pr., Ann Arbor, pp. xii+47, with 12 plates and 16 plans, \$2.50), admirably describes excavations of great importance, on a sacred site which enjoyed its greatest prosperity from the end of the first century A.D. till Severan times: note p. 9, fig. 4, painting of Heron on house-wall; p. 21, no evidence of Christianity here; A. C. (ALDERINI), *Aeg.* 14 (1934), 494, reviews his *Karanis 1924-31*. For other excavations, cf. G. BAGNANI, *Gli scavi di Tebtunis* (*ibid.*, 3-13); 'cf. *Boll. filol. class.* 6 (1934), 34-6'; E. ZIFFERT, *Tebtunis* (*Arch. f. Orientforsch.* 10 (1935), 193-4); 'Prince OMAR TOUSSOUN, *Les ruines sous-marines de la Baie d'Aboukir* (*Bull. Soc. Arch. Alex.* No. 29 (1934), 343-54); F. CUMONT, *Nouveaux hymnes grecs à Isis* (*Rev. Arch.*, 6th ser. 6 (1935), 97-8 on Vogliano's find at Medinet Madi).

C. H. ROBERTS, *A Fragment of a New Hymn to Demeter* (*Aeg.* 14 (1934), 447-51), includes the description of Demeter as *πολυώνμος*, and important remarks on an anti-Callimachean tendency. His *Two Papyri from Oxyrhynchus*, noticed last year, is reviewed by CL. PRÉAUX, *'Chron. d'Ég.* 10 (1935), 155'. M. ROSTOV-TZEFF's review in *Gnomon* 11 (1935), 522-8 of U. KULL-GYLLENBAND, *Der Gnomon des Idios Logos*, has valuable comment on the *κύριος* titulature, on the formal poem (cf. those which Vettius Valens prefixes to individual books of his work—as does Firmicus Maternus in his *Mathesis*), and on the meaning of *ἰδιωτικὰ τέλεις*. His *Kleinasiatische u. syrische Götter im römischen Aegypten* is reviewed by R. D'USSAUD, *Rev. hist. rel.* 109 (1934), 241. M. H(OMBERT), *Nouveaux documents relatifs au culte d'Horus-Apollon* (*Chron. d'Ég.* 10 (1935), 406-8) reviews R. WEILL-P. JOUGUET, *Horus-Apollon au Kôm el-Ahmar de Zawîet el-Maïetin* (*Mé. Maspero* 2, 81-104), with information on the emergence of Horus in Roman times as Apollo *archegetes* and on an interesting fire-altar. E. HARRISON, *A Sanctuary at Alexandria* (*Comb. Univ. Reporter*, May 21, 1935) makes the convincing suggestion that the Paneion was not a shrine but a place for signalling. M. NORSÄ, &c. *Da papii della Società Italiana* (*Aeg.* 15 (1935), 207-29) includes a reference (2nd-3rd cent. A.D.) to τὰ *Ἀνμύρια* and an epistolary *proskynema* to Sarapis for the addressee. G. VON MANTEUFFEL, *Zur Prophetie*, in *P.S.I.* VIII 982, is reviewed by M. HOMBERT, *Chron. d'Ég.* 10 (1935), 410, as is B.-A. VAN GRONINGEN, *Trois petites notes sur l'hymne à Déméter de Callimaque*, *ibid.* 408; and E. BRECCIA's *Terrecotte figurate greche e greco-egizie del Museo di Alessandria*, II, in *JHS* 55 (1935), 250. A. ADRIANI, *Annuario del Museo Greco-Romano*, I (1932-3), *ibid.* 89 (note head of Sarapis), H. DRERUP, *Die Datierung der Mumienporträts* by V. MÜLLER, *AJA* 39 (1935), 427.

The appearance of the second volume of *Platins Schriften*, übersetzt von RICHARD HARDER (F. Meiner, Leipzig, 1936, pp. 207) is an event of the first importance for all our studies.

C. GRAECO-EGYPTIAN CULTS OUTSIDE EGYPT

M. N. TOD, *The Progress of Greek Epigraphy, 1933-1934* (*JHS* 55 (1935), 172-223) is invaluable as always; cf. pp. 208 (*Eg. ἑπογραφμμενέν* at Aquileia), 202 (Carpathos), 210 (Stratonicea Cariae), 204 (*ἑποφόρος ἐπτάετος* on Samos). H. G. G. PAYNE, *Archaeology in Greece, 1934-1935* (*ibid.* 147-71), notes, p. 168, the discovery at Amnisos in Crete of a temple of Egyptian gods, beneath which lies a Minoan building. H. GOLDMAN, *Preliminary Expedition to Cilicia, 1934, and Excavations at Gözlu Kule, Tarsus, 1935* (*AJA* 39 (1935), 526-49), includes p. 529, fig. 3, plaster mould of Zeus Ammon or Asclepius, 530 lamps (mid 2nd cent. A.D.) with Sarapis, Isis, humped bull of Isis, also a fine head of Sarapis (Fig. 6). In *AJA* 39 (1935), 611, we learn of a Ptolemaic male statue-head found in the precinct of Isis and Sarapis at Rome, *ibid.* 612 of Hellenic (not Graeco-Egyptian) influence in the Nabataean area.

CHARLOTTE E. GOODFELLOW, *Roman Citizenship, a Study of its Territorial and Numerical Expansion from its Earliest Times to the Death of Augustus* (Diss. Bryn Mawr, 1935, pp. 125), which is in itself of substantial interest, concerns us here because the composition of the dominant class in the Roman Empire is of the utmost importance as a factor in religious evolution. H. HARRINGTON, *The Prototypes of the Designs on Roman Pottery* (Diss. summarized in *Harv. Stud. Class. Phil.* 46 (1935), 204-6), remarks on the small influence of Oriental cults at Rome or in the Empire on lamps, except for Alexandria, where the decoration was commonly taken from Hellenized Egyptian deities. CL. BOSCH, *Die kleinasiatische Münzen der römischen Kaiserzeit, Teil II, Einzeluntersuchungen. Bd. I: Bithynien, I. Hälfte* (Kohlhammer, Stuttgart, 1935) is the first instalment of an indispensable work, in which religious history receives the fullest attention. M. SCHWABE, *Eine altägyptische Totenopferformel in einem griechischen Grabepigramm aus Gaza* (*Journ.*

Pal. Or. Soc. 13 (1933), 84-9) finds in the recently discussed verse epitaph from Gaza an ancient Egyptian formula used in offerings to the dead: 'a boon which the king gives'.

N. M. HOLLEY, *Plutarch's Version of the Cult of Isis and Osiris*, has appeared only in a summary (*Proc. Class. Ass.* 32 (1935), 46-9). T. A. BRADY, *The Reception of the Egyptian Cults by the Greeks, 330-30 B.C.*, has been reviewed by H. HENNE, *Rev. et. anc.* 37 (1935), 481-3, and H. J. ROSE in *Cl. Rev.* 49 (1937), 206-7.

D. RULER-WORSHIP

C. W. McEWAN, *The Oriental Origin of Hellenistic Kingship* (Or. Inst. Univ. Chicago, Stud. Anc. Or. Civil. 13, 1934, pp. xii+34), I am reviewing in *Cl. Phil.* 1936. M. ROSTOVITZ, *ΠΡΟΦΟΝΟΙ* (*JHS* 55 (1935), 56-68) discusses brilliantly the dating in Perg. Dura 20 (180 A.D.), which includes the priests of Zeus, Apollo, and king Seleucus—a curious survival from Macedonian colonial practice, and a relief which shows Zeus Olympios as the Tyche of Dura being crowned by Seleucus Nicator. A. ALFÖLDI, *Insignien und Tracht der römischen Kaiser* (*Röm. Mitt.* 50 (1935), 1-171, 24 pl., 18 fig.) is the magnificent sequel to his work noted last year (*JEA* 21, 78-9), and, like it, redeems the subject from a sterile isolation. In *Gnomon* 11 (1935), 435-92, he reviews H. KRUSE, *Studien zur offiziellen Geltung des Kaiserbildes im römischen Reiche* (*ibid.* 508-9). H. SCHAEFER reviews E. SKARD, *Zwei religiös-politische Begriffe: Euergetes-Concordia*. M. P. CHARLESWORTH, *Some Observations on Ruler-cult, especially at Rome* (*Harv. Theol. Rev.* 28 (1935), 5-44), is very wise and helpful, particularly on the self-identification of a ruler with a particular deity, and on Domitian's policy. E. EHNMARK, *The Idea of God in Homer* (Diss. Uppsala, 1935. Almqvist & Wiksells Boktryckeri—A.B., pp. xiv+103) is most noteworthy for the definition of a concept as it affected all later development; on this and on its genesis, E. shows the good sense, competence, and penetration which we have come to associate with Swedish work. LUDWIG BIELER, *ΘΕΙΟΕΑΝΗΡ, Das Bild des „göttlichen Menschen“ in Spätantike und Frühchristentum*, I. Bd. (Wien 1935; Buchhandlung Oskar Höfels 1, Seilerstätte Nr. 28, pp. xvi+150), is the work of a pupil worthy of L. Radermacher: a most useful typological study, ranging from early to late times, and including men's ideas of philosophers, saints, teachers, and warriors, as well as of rulers; cf. M.-J. LAGRANGE, *Socrate et Notre-Seigneur Jésus-Christ d'après un livre récent* (*Rev. Bibl.* 44 (1935), 5-21). For theoretical views as held, E. PETERSON, *Der Monotheismus als politisches Problem* (pp. 138, Leipzig, J. Hegner, 1935, R.M. 4.50 bound) is of the highest value, a work as thoughtful and original as it is learned (note p. 21 on the Andros hymn to Isis, 114 f. on the comparison of a ruler with Zeus, 129 f. on the *Kore Kosmou*). For views of monarchy, FR. ALTHEIM, *Alt Römisches Königtum (Die Welt als Geschichte, 1* (1935), 413-34), is most interesting.

We may note also CL. PRÉAUX, *Bibliographie papyrologique* (*Chron. d'Ég.* 10, 1935), 149-50, on oath by *δαίμων* of private person; *ibid.* 383 on the apotheosis of Arsinoë in the new *δευγμήσις* of Callimachus; W. OTTO's admirable review of BGU VIII in *Hist. Zeit.* 152, 539-46, esp. 545-6; G. H. MACURDY, *Julia Berenice* (*Am. Journ. Phil.* 56 (1935), 246-53); C. C. EDGAR, *A note on the Ptolemaieia* (*Mél. Maspero* 2, 53-6); P. ROUSSEL, *Une inscription d'Aphroditopolis* (*ibid.* 33-40); P. LACAU, *Inscriptions latines du temple de Louxor* (*Ann. Serv.* 34 (1934), 17-46; dedications in honour of Roman emperors of early 4th cent.), reviewed by CL. PRÉAUX, *Chron. d'Ég.* 10 (1935), 410-11; G. C. RICHARDS, *Proskynesis* (*Cl. Rev.* 48 (1934), 168-70); W. H. BUCKLER, *Auguste, Zeus Patroos* (*Rev. Phil.* 61 (1935), 177-88), a most valuable study of the early evolution of the Imperial cult in the province of Asia, and *Documents from Phrygia and Cyprus* (*J.H.S.* 55 (1935), 71-8), for Pergamene institutions; 'the libation and the sacrifices for the king' in R. H. PFRIFFER, *State Letters of Assyria* 166, no. 233; H. P. L'ORANGE, *Sol invictus imperator: Ein Beitrag zur Apotheose* (*Symb. Oslo.* 14 (1935), 86-114; 13 figs.), a notable study of later Roman development; reviews of S. LÖSCH, *Deitas Jesu u. antike Apotheose* by KOCH, *Theol. Lit.-Z.* 60 (1935), 29-30, and P. B., *Religio* 11 (1935), 181-2, of FR. SAUTER, *Das Römische Kaiserkult bei Martial u. Statius* by G. BREITHAUP, *Theol. Lit.-Z.* 60 (1935), 154-5, H. J. ROSE, *Gnomon*, 11 (1935), 51-3, A. D. NOCK, *JRS* 25 (1935), 110-11, of L. R. TAYLOR, *The Divinity of the Roman Emperor* by 'W. SESTON, *Rev. hist. rel.* 111 (1935), 287-90', an interesting dedication in Cos to Asclepius identified with the emperor mentioned, *JHS* 55 (1935), 203; a summary in *AJA* 39 (1935), 396 of J. AYMARD's article on the identification of empresses with Venus, esp. under the Antonines; L. R. TAYLOR, *Varro's De gente populi Romani* (*Cl. Phil.* 29, 1934, 221-9).

E. JUDAISM

The new Septuagint by A. RAHLFS is guaranteed by its editor's name, well printed, and cheap (2 vols.), Privilegierte Württembergische Bibelanstalt, Stuttgart, 1935, reviewed by HEINZELMANN (*Theol. St. Kr.* 106

(1934/5), 330). On the LXX we have also A. SPERBER, *Probleme einer Edition der Septuaginta (Festschrift P. Kahle, 1935, 30-46: on the exemplaria) and The Problems of the Septuagint Recensions (J. Bibl. Lit. 54 (1935), 73-92)*, W. E. BARNES, *The recovery of the 'Septuagint' (J. Theol. Stud. 36 (1935), 123-31: 127, suggestion on use of Psalms in worship)*, O. H. E. BURMESTER, *The Bohairic Pericope of III Kingdoms, xviii, 36-9 (ibid. 156-60)*, J. SCHNEIDER, *πνεῦμα ἡγεμονικόν. Ein Beitrag zur Pneuma-Lehre der LXX (Z. neut. Wiss. 34 (1935), 62-9)*. I have been sent references to HENRY G. MEECHAM, *The Letter of Aristeas. A linguistic study with special reference to the Greek Bible (Publ. Univ. Manchester, CXXI, pp. xxi, 355, 1935)*, and to a review of P. R. TRAMONTANO, *La Lettera di Aristeo a Filocrate* by C. DEL GRANDE, *Riv. indo-greco-ital.* 18 (1934), 113-14.

RALPH MARCUS, *Recent Literature on Philo (1924-1934) (Jewish Studies in Memory of George A. Kohut, 463-91; N.Y. 1935)*, is an invaluable critical survey. ERWIN R. GOODENOUGH, *By Light, Light. The Mystic Gospel of Hellenistic Judaism* (pp. xv+436: Yale University Pr., \$5: Humphrey Milford, 22s. 6d., 1935) is a provocative book of great importance: I am reviewing it at length in *Gnomon*. We may note also the most welcome sixth volume of F. H. COLSON's Loeb Philo, W. L. KNOX, *Abraham and the Quest for God (Harv. Theol. Rev. 28 (1935), 55-60: note for 'conversion' schema and for Jewish views of astrology)*, O. G. VON WESSENDORF, *Bemerkungen zur iranischen Lichtlehre (Arch. f. Rel. 31 (1934), 177-87)*, review of S. TRACY, *Philo Judaeus and the Roman Principate* by 'H. HENNE, *Rev. ét. anc.* 36 (1934), 542-5'. In *A Lexicon to Josephus* compiled by HENRY ST. JOHN THACKERAY and RALPH MARCUS, Pt. II, ἀργύρεος τοῦ διαστῆλιν (pp. 81-160; Geuthner, Paris, 1934), we have the continuation of a most excellent and necessary work of reference made possible by the liberality of the Alexander Kohut Foundation and the skill and self-sacrifice of Dr. Marcus. No ancient author has been better served lexicographically. R. BERNHEIMER, *Vitae prophetarum (J. Am. Or. Soc. 55 (1935), 200-3)*, has interesting comments on this curious text.

Our views of the possibilities of Hellenistic Judaism are greatly enlarged by M. ROSTOVITZ, *Die Synagoge von Dura (Röm. Quartalschr. 42 (1934), 203-17)*; cf. E. WEIGAND's remarks *BZ* 35 (1935), 482-4, and G. WODTKE, *Malereien der Synagoge in Dura u. ihre Parallelen in der christlichen Kunst (Z. neut. Wiss. 34 (1935), 51-62)*, and P. ROMANOFF's review, *AJA* 39 (1935), 634-5, of E. L. SUKENIK, *Ancient Synagogues in Palestine and Greece*.

F. MAGIC

S. EITREM, *Fragment of a Greek Cryptogram in the Oslo Collection (Mél. Maspéro 2, 113-17 with pl.)*, publishes a fragment from the treatise to which HUNT's *Greek Cryptogram* belonged, with admirable comment (note p. 117 on universalist piety shown in address to Isis). CL. PRÉAUX, *Une amulette chrétienne aux musées royaux d'art et d'histoire de Bruxelles (Chron. d'Ég. 10 (1935), 361-70 with pl.)*, describes a wooden tablet with Ps. 28 (29).3 six times, and alphabet-magic on the back: 6th-7th cent. A.D. P. COLLART, *Psaumes et amulettes (Aeg. 14 (1934), 463-7)*, treats of the Reinach amulet and one in BILABEL's work, reviews of which are noted later. TH. HOFFNER, *Ein neuer griechischer Zauberpapyrus (Pap. Wessely Pragens. Graec. no. 1) (Archiv Orientalni 7 (1935), 355-66 and pl.)* publishes a Christian spell of ca. A.D. 300 from the Fayyūm; 50 lines of Greek and 4 of Coptic. W. H. WORRELL, *Coptic Magical and Medical Texts (cont.) (Orientalia, n.s. 4 (1935), 184-94)*, gives us more of the treasures of Michigan: no. 5, 'probably fairly early', a wonderful invocation to oil, in which Christianity and the Osiris myth combine, is particularly interesting.

No recent publication has done as much to extend our knowledge of the background of Graeco-Egyptian magic as ALAN H. GARDNER, *Hieratic Papyri in the British Museum. Third Series. Chester Beatty Gift, Vol. I text, Vol. II plates (London, 1935)*. The tale of the blinding and vindication of Truth—really a tale of Horus vindicating his father Osiris from the wrongs done by Seth—shows the use of allegory in Egypt before the incoming of Greek influence. Then we have an extraordinary fragment of a dream-book, with a spell for averting the evil effects of threatening dreams, monotheistic hymns, magical texts, a mythical story of the Palestinian goddess Anat, temple ritual with spells on the verso. I hope to return elsewhere to the connexion—now reinforced—between magic and formal temple ritual.

We have also A. DELATTE, *La méthode oniromantique de Blaise d'Athènes (Mél. Navarre, 1935, 115-22; on an interesting Byzantine text)*; J. BIDEZ, *Plantes et pierres magiques d'après le Ps.-Plutarque De fluviis (ibid., 25-40; rehabilitates some of the suspected sources quoted in this treatise)*; TH. HOFFNER, *Nekromantie (PW XVI, 2216-33: 2228 on Oriental precedents)*, *Theurgie (ibid. VI A, 258-70)*, *Der religionsgeschichtliche Gehalt der grossen demotischen Zauberpapyri (Archiv Orientalni 7 (1935), 89-120; dedicated to the memory of F. Ll. Griffith; careful, learned, and useful)*; S. EITREM, *Varia 74 (Symb. Oslo. 14 (1935), 134; on Melampus and PGM IV, 1115)*, and 78 (*ibid.* 136-7; on the comparison of speech with a sword or arrow, borrowed

from the O.T.); CAMPBELL BONNER, *Palladas and Jewish Reflections upon the Beginnings of Man* (*J. Am. Or. Soc.* 55 (1935), 196-9; on the striking parallel of *Anth. Pal.* x, 45 and *Pirge Aboth* III, 1, and certain analogies in PGM IV); K. PREISENDANZ, *Dans le monde de la magie grecque* (*Chron. d'Ég.*, 10 (1935), 335-42; an interesting sketch); *Ein altes Ewigkeitssymbol als Signet u. Druckmarke* (*Gutenberg-Jahrbuch* 1935, 143-9); KARL FR. W. SCHMIDT, *Zu den Leydener Zauberpapyri* (*Phil. Woch.* 55 (1935), 1174-84); P. PERDRIZET, *BPINTATHN, l'un des noms magiques du Dieu Chnoum* (*Mél. Maspero* 2, 137-44); E. RIESS, *Religious Gleanings from the Magical Papyri* (*Class. Weekly* 28 (1935), 105-11); W. TILL, *Zu dem Wiener koptischen Zaubertexten* (*Orientalia*, n.s. 4 (1935), 195-221; on V. STEGEMANN's *Die koptische Zaubertexte der Sammlung Papyrus Erzherzog Rainer in Wien, Sitzungsab. Heidelberg*, 1933-4, i—also reviewed by H. J. POLOTSKY, *OLZ*, 1935, 88-91, where we have the promise of an investigation on the form and the legend material of the Coptic texts—very instructive; note 198 on a blessing of oil); H. J. POLOTSKY, *Zu einigen Heidelberger koptischen Zaubertexten* (*Orientalia*, n.s. 4 (1935), 416-25); on F. BILABEL-A. GROHMANN, *Griechische, koptische, u. arabische Texte zur Religion u. religiösen Literatur in Ägyptens Spätzeit*; note 417 on Gabriel in a love-charm, 421 on the Sator Arepo formula. On the same publication cf. CL. PRÉAUX, *Chron. d'Ég.* 10 (1935), 399-401; F. ZUCKER, *BZ* 35 (1935), 164; F. PEISTER, *ibid.* 387 ff.; V. STEGEMANN, *Theol. Lit.-Z.* 60 (1935), 225-8; A. C. (ALDERINI), *Aeg.* 14 (1934), 490-1. 'P. GORISSEN, *Ontwikkelingsgang der studien over de Grieksche magische papyri uit Egypte* (*Philologische Studien* 6 (1934-5), 190-200)'; reviews of G. de JERPHANION, *La formule magique Sator Arepo ou Rotas Opera; vieilles théories et faits nouveaux* (*Rech. sc. rel.* 25 (1935), 188-225) by F. D(ÖLGER), *BZ* 35 (1935), 447, of BELL-NOCK-THOMPSON, *Magical Texts*, by P. COLLART, *Rev. de Phil.*, n.s. 9 (1933), 308-10. H. J. ROSE remarks in *Year's Work in Classical Studies*, 1935, 65, on a Coptic charm published by W. E. CRUM, *JEA* 20 (1934), 51-3. For the naming of persons, usual in these texts, with reference to the mother alone, cf. A. S. F. GOW, *Notes on the Fifth Idyll of Theocritus* (*Cl. Quart.* 29 (1935), 65-71); for the use of antithesis, cf. ERNST MOSER's thoughtful *Entsprechung benachbarter Worte u. Begriffe in der Sprache der römischen Elegiker. Ein Beitrag zum Stil der römischen Elegie* (Diss. München, 1935. Druck des Salesianischen Offizin, München, O 11, pp. 157); for the accumulation of synonyms, cf. RUDOLPH TILL, *Die Sprache Catos* (*Philol. Supp.* xxviii, ii (1935), pp. 102; an interesting monograph), 22; for a *defixio*, cf. M. V. TAYLOR-R. G. COLLINGWOOD, *Roman Britain in 1934* (*JRS* 25 (1935) 201-27), 225-6; for a Greek source, K. KERÉNYI, *Sofrone ovvero il naturalismo greco* (*Riv. di fil.* 63 (1935), 1-19); for Oriental analogies, pp. 179 ff. of R. H. PFEIFFER, *State Letters of Assyria* (*Am. Or. Ser.*, vi (1935), pp. xiii, 265); for relevant mythology, S. EITREM, *Tierdämonen* (*PW* vi A, 862-921: very helpful); for a stylistic point, A. WILHELM, *ΠΟΛΛΑ ΠΟΛΛΩΝ* (*Symb. Oslo.* 14 (1935), 6-21); and for a wealth of helpful information and wise judgement on magic in itself and as it is represented in literature, *Publi Vergili Maronis Aeneidos liber quartus*, edited by ARTHUR STANLEY PEASE (Harv. Univ. Pr. and Milford, 1935: pp. ix+568, \$6.).

G. HERMETICA AND ASTROLOGY

On C. H. DODD, *The Bible and the Greeks* (Hodder and Stoughton, London, 1935, pp. xv+264, 10s. 6d.), a contribution of capital importance for the understanding of the Jewish element in *Corp. Herm.*, as of the N.T. in relation to the LXX, I am writing in *Am. Journ. Phil.* On M. WELLMANN, *Marcellus v. Side u. die Koiranidea des Hermes Trismegistos* (*Philol. Supp.* 27, ii, 1934), see H. J. ROSE, *Cl. Rev.* 49 (1935), 40. For the history of the text of the *Hermetica*, cf. J. BIDEZ, *Aréthas de Césarée* (*Byzantion* 9 (1934), 391-408: 394 on Platonizing interests in 9th-10th cent.; 397 f. on refutatory notes inserted in Julian, parallel to that of Psellus in *Corp. Herm.* 1); for the prophecy in *Asclepius*, cf. K. JACKSON, *The Auguries of Esdras concerning the Character of the Years* (*Bull. Board Celtic Studies* 7 (1933), 5-14); for the *Iatromathematika*, cf. F. CUMONT, *Les 'Prognostica a decubitu' attribués à Galien* (*Bull. Inst. hist. belge de Rome*, fasc. xv (1935), 119-31; 128 ff. on Nechepeo and Petosiris).

From CUMONT's pen we have also *Les noms des planètes et l'astrolatrie chez les grecs* (*L'Antiquité classique* 4 (1935), 5-43), one of the finest things that even he has written; and it is no injustice to set beside it J. BIDEZ, *Les écoles chaldéennes sous Alexandre et les Séleucides* (*Mél. Capart*, Brussels, 1935, 41-89): both are fundamental studies of the meeting of the Greek and the Oriental in astral matters. BIDEZ has given us also *Les couleurs des planètes dans le mythe d'Er* (*Bull. acad. roy. Belgique*, 1935, 257-77: on Babylonian lore in Plato). HEBER D. CURTIS-FRANK E. ROBBINS, *An Ephemeris of 467 A.D.* (*Publ. Observ. Univ. Mich.* vi (1935), no. 9, 77-100) is an able edition of a novel text (note p. 85 on the week, 86 on lucky and unlucky days); reviewed by J. K. FOTHERINGHAM, *Cl. Rev.* 49 (1935), 242. On Egyptian technique, cf. L. BORCHARDT, *Die Messung des Sonnendurchmessers im astronomischen Papyrus von Oslo* (*Symb. Oslo.* 14 (1935), 73-6).

On the term *τροιχείον*, cf. pp. 41-2 of B. EINARSON's pioneer *Mathematical Terms in Aristotle's Logic* (*Am. Journ. Phil.* 57 (1936), 36-54 and 151-72). H. DILLER in his article *Thessalos* (*PW* s.v. no. 6, 180-2) casts doubt on the identification of the doctor of Tralles with the Thessalos of the letter in *CCAG* VIII, iii and iv. W. GUNDEL has produced *Astronomie, Astralreligion, u. Astrologie. Darstellung u. Literaturbericht 1907-1933* (*Bursian* 242 (1934), 1-149), and V. STEGEMANN, *Über Astronomisches in den koptischen Zaubertexten* (*Orientalia*, n.s. 4 (1935), 391-410). O. LAGERCRANTZ, *Ein alchemistisches Rezept* (*Symbol. Oslo* 14 (1935), 1-5) is of interest: I have been sent a reference to R. PEISTER, *Teinture et alchimie dans l'Orient hellénistique* (*Seminarium Kondakovianum* VII (1935), 1-59; said to utilize P. Leid x and P. Holm.); on alchemy cf. also *BZ* 35 (1935), 510.

H. NEW TESTAMENT

Questions of far-reaching importance are raised by *Fragments of an Unknown Gospel and other Early Christian Papyri*, edited by H. IDRIS BELL and T. C. SKEAT (British Museum, London, 1935, pp. x+63, with 5 pls., 4s.). The Gospel is preserved in a codex (not after mid. 2nd cent.), and the editors—in a model publication—argue that, in spite of all that it has in common with our Gospels, it is to be regarded as an independent production, without *Tendenz*. They return to the theme in *The New Gospel Fragments* (*Brit. Mus.*, London, 1935, pp. 33, 1 pl., 1s.), in which they give a revised text and a valuable critique of some views expressed on it. It is not for me to express an opinion on the question at stake, but my instinct is to suppose that the text is an independent working up of floating sayings and stories, made in Egypt very early, before the four canonical Gospels were accepted as such. Cf. on the issues, M. HOMBERT, *Chron. d'Ég.* 10 (1935), 371-4; E. BUONAIUTI, *Religio* 11 (1935), 370-2; R. P. CASEY, *Am. Journ. Phil.* 57 (1936), 103-7; E. B., *Religio* 11 (1935), 188; E. KLOSTERMANN, *Theol. Stud. Kr.* 106 (1934/5), 318-24; M.-J. LAGRANGE, *Deux nouveaux textes relatifs à l'Évangile* (*Rev. Bibl.* 44 (1935), 321-43; handling also the *Diatessaron* fragment discussed later); F. C. BURKITT, *J. Theol. Stud.* 36 (1935), 302-4; W. BAUER, *GGA* 198 (1936), 24-30. (I have been sent references also to L. CERFAUX, *Rev. hist. eccl.* 31 (1935), 569-72; G. DIX, *Laudate* 13 (1935), 97-120; C. A. PHILLIPS, *Expository Times*, May 1935, 363-5; G. GHEDINI, *Riv. di fil.*, n.s. 13 (1935), 385-7, and *La Scuola Cattolica* 63 (1935), 500-12; P. VANNUTELLI, *Boll. fil. class.*, 1935, 18-20; F. ZILKA, *Archiv Orientalni* 7 (1935), 530-1; E. R. SMOTHERS, *Rech. sc. rel.* 25 (1935), 358-62; D. G., *Aeg.* 15 (1935), 335-6; R. V. TASKER, *Ch. Quart. Rev.*, Oct. 1935, 126-31; B. A. VAN GRONINGEN, *Nieuwe Theologische Studien* 18 (1935), 210-14; H. VOGELS, *Theologische Revue*, 34 (1935), 312-15; R. EISLER, *C.-R. Ac. Inscr. et B.-L.* 1935, 197-202). The volume of BELL and SKEAT includes also no. 2 (early 3rd cent. A.D.), fragments of Gospel commentary, no. 3 (3rd cent.), 2 Chron. 24. 17-27, no. 4 a leaf from a liturgical book (4th-5th cent.), on which BURKITT, *l.c.*, had an important comment.

If this discovery raises questions, another find bears on an old problem. *A Greek Fragment of Tatian's Diatessaron from Dura, edited with Facsimile, Transcription, and Introduction by CARL H. KRAELING* (*Studies and Documents*, ed. KIRSOPP LAKE and SILVA LAKE, III, 1935. Christophers, London, pp. 37 and pl.) gives us with excellent discussion a priceless parchment scrap of c. A.D. 222. Cf. on it F. C. BURKITT, *J. Theol. Stud.* 36 (1935), 255-9, A. SOUTER, *Gnomon* 11 (1935), 668-9. The year has given us also C. H. ROBERTS, *An Unpublished Fragment of the Fourth Gospel in the John Rylands Library* (Manchester Univ. Pr., 1935, pp. 34, with facs.), extremely significant as a codex of the first half of the second century A.D.: the editorial work is admirable. There is further: HENRY A. SANDERS, *A Third-Century Papyrus Codex of the Epistles of Paul* (Ann Arbor, 1935), reviewed by F. G. KENYON, *Am. Journ. Phil.* 57 (1936), 91-5, J. M. CREED, *Cl. Rev.* 49 (1935), 241, W. G. KÜMMEL, *Theol. Lit.-Z.* 60 (1935), 307-9, F. C. BURKITT, *J. Theol. Stud.* 36 (1935), 304-5, LAGRANGE, *Rev. Bibl.* 44 (1935), 625-9, S. COLOMBO, *Riv. di fil.* n.s. 13 (1935), 387-90, L. CERFAUX, *Rev. hist. eccl.* 31 (1935), 574-7, and with S. C. E. LEGG's first part of the new *Tischendorf* by LAGRANGE, *Rev. Bibl.* 44 (1935), 623-9.

Publication of the Chester Beatty texts continues. H. A. SANDERS, *Some Fragments of the Oldest Beatty Papyrus in the Michigan Collection* (*Proc. Am. Phil. Soc.* 75 (1935), 313-14), gives us the oldest known text of the LXX. F. G. KENYON, *Chester Beatty Biblical papyri*, fascs. iii and iv¹ are reviewed by F. C. BURKITT, *J. Theol. Stud.* 36 (1935), 195-6 (cf. *ibid.*, 191-4, his comment on A. V. VALENTINE-RICHARDS, *The Text of Acts in Codex 614 (Tisch. 137) and its Allies, with an Introduction by J. M. CREED*, and 184-6, a most instructive critique of J. SUNDWALL, *Die Zusammensetzung des Marcusevangeliums*); L. CERFAUX, *Rev. hist. eccl.* 31 (1935), 572-4. M. HOMBERT, *Les papyrus Chester Beatty* (*Chron. d'Ég.* 10 (1935), 169-71) summarizes a

¹ I learn that fasc. v, Numbers and Deuteronomy, has since appeared.

paper by P. COLLOMP, *Les papyrus Chester Beatty* (*Rev. hist. philos. rel.* 14 (1934), 130-43, where follow, 144-54, notes by J. HÉRING: on Christian preference of *codex* to *volumen*. There have appeared also 'J. SCHMID, *Der Apokalypsetext des Chester Beatty Papyrus P^{4v}* (*Byz.-neogr. Jahrb.* 11 (1934), 65-108); E. J. GOODSPEED, *The World's Oldest Bible* (*J. Bibl. Lit.* 54 (1935), 126); H. LIETZMANN, *Die Chester-Beatty-Papyrus des N.T.* (*Die Antike* 11 (1935), 139-48); P. L. COUCHOU, *La plus ancienne bible chrétienne; les papyrus Chester Beatty* (*Rev. hist. rel.* 109 (1934), 207-19); R. V. G. TASKER, *The Readings of the Chester Beatty Papyrus in the Gospel of St. John* (*J. Theol. Stud.* 36 (1935), 387-91); reviews of H. LIETZMANN, *Zur Würdigung des Chester-Beatty-Papyrus der Paulusbriefe*, by H. STELTER, *Theol. Lit.-Z.* 60 (1935), 155-6 and LAGRANGE, *Rev. Bibl.* 44 (1935), 627-9, of AUG. MEHL, *Codex Evangeliorum et Actuum in collectione papyrorum Chester Beatty* by L., *ibid.* 43 (1934), 612-13, of F. G. KENYON, *Recent Developments in the Textual Criticism of the N.T.* by E. C. COLWELL, *Cl. Phil.* 30 (1935), 188; 'FR. X. PIERCE, *The Chester Beatty Papyri* (*Eccles. Review* 91 (1934), 93-9); 'L. G. FONSECA, *De antiquissimo Evangeliorum MS. in collectione Chester Beatty extanta* (*Verb. Dom.* 4 (1934), 20-2)'.

On N.T. textual criticism in general, cf. E. C. COLWELL, *The Complex Character of the Late Byzantine Text of the Gospels* (*J. Bibl. Lit.* (1935), 211-21); B. H. STREETER, *Origen, N. and the Caesarean text* (*J. Theol. Stud.* 36 (1935), 178-80), and *The Caesarean Text of Matthew and Luke* (*Harv. Theol. Rev.* 28 (1935), 231-5; rejoinder to R. V. G. TASKER, *The Text used by Eusebius in Demonstratio Evangelica in quoting from Matthew and Luke*, *ibid.* 61-7); A. SOUTER, *Greek and Hebrew Words in Jerome's Commentary on St. Matthew's Gospel* (*ibid.* 1-4).

G. KITTEL's *Theologisches Wörterbuch* has advanced in the same magnificent style to vol. III, pt. 4, including e.g. a long, valuable article on *Θεός*; II, 8 is reviewed by P. B., *Religio* 11 (1935), 179-80, II, 12-13, *ibid.* 477; H. KITTEL reviews volume I in *Gnomon* 11 (1935), 492-7. ERICH STANGE, *Das Wort u. die Wörter. Das Sprachgut der Christenheit in seiner Bedrohung durch die Sprache der Welt* (offprint paginated 3-46, from *Pastoralblätter* 78 (1935)), studies the special character of the Christian vocabulary, with reference also to its transference into German, and is of interest for the whole problem of the translation of religious ideas. G. BICKERMANN, *Utilitas crucis. Observations sur les récits du procès de Jésus dans les Évangiles canoniques* (*Rev. hist. rel.* 112 (1935), 169-241) is of exceptional interest and wisdom, and K. S. GAPP, *The Universal Famine under Claudius* (*Harv. Theol. Rev.* 28 (1935), 258-65), is decidedly interesting.

I. MANICHAISM

POLOTSKY-IBSCHER, *Manichäische Homilien*, is reviewed by E. B., *Religio* 11 (1935), 183-4, W. BAUER, *Theol. Lit.-Z.* 60 (1935), 357-9, A. D. NOCK, *Am. Jour. Phil.* 57 (1936), 108-9, and discussed by FR. CUMONT, *Homélies manichéennes* (*Rev. hist. rel.* 111 (1935), 118-24), with most instructive comment. Cf. A. J. POLOTSKY, *Manichæismus* (*PW Suppl.* VI, 240-71), F. C. BURKITT, *Xrōstoy and Paḏvāxtay Call and Answer* (*J. Theol. Stud.* 36 (1935), 180-1). H. S. NYBERG, *Forschungen über den Manichæismus* (*Z. neut. Wiss.* 34 (1935), 70-91), and pp. 284-320, cf. H. JONAS, *Gnosis und spätantiker Geist, Teil I: Die mythologische Gnosis, mit einer Einleitung. Zur Geschichte u. Methodologie der Forschung. Vorwort von RUDOLF BULTMANN* (*Forsch. Rel. Lit. A. u. N.T.*, N.F. 33, 1934, pp. viii+376, Vandenhoeck und Ruprecht, Göttingen), which I am reviewing in *Gnomon*. For an interesting survival of Manichaean ideas, cf. V. MINORSKY's article on the *Ahl-i Hak* (offprinted from *Encyclopaedia of Islam*).

J. CHRISTIAN

CAMPBELL BONNER, *A Papyrus Codex of the Shepherd of Hermas (Similitudes 2-9), with a Fragment of the Mandates*, has been reviewed by P. COLLOMP, *Rev. ét. anc.* 37 (1935), 108-9, W. BAUER, *Theol. Lit.-Z.* 60 (1935), 51, H. I. BELL, *JEA* 21 (1935), 122, 'D. G.', *Aeg.* 15 (1935), 336-7, G. GHEDINI, *Athenaeum* 13 (1935), 281-3, D. B. REYNOLDS, *Rech. Théol. anc. et médiév.* 7 (1935), 208-9, P. COLLART, *Rev. de phil.* 9 (1935), 311-12, E. H. KASE, JR., *Am. Jour. Phil.* 56 (1935), 276 f., F. ZUCKER, *BZ* 35 (1935), 107-8, G. GHEDINI, *Riv. di fil.*, s.s. 13 (1935), 411-12, 'Times Literary Supplement', April 26, 1934. I have received a reference to A. PUECH, *La langue d'Hermas* (*Mé. Navarre*, 361-3).

R. P. CASEY, *An Early Homily on the Devil ascribed to Athanasius of Alexandria* (*J. Theol. Stud.* 36 (1935), 1-10), publishes an interesting anecdote (p. 6, l. 29 read ἀνάγκη ἡμᾶς εἰδέναι; p. 6, 33 εἰς(ε) ἀνθρώπων, without postulating lacuna; note p. 5, 11-13 on εἰσαγωγή as a serious question. For the rest, the document is one of the common theoretical attacks on paganism). CASEY's *The study of Gnosticism* (*ibid.*, 45-60), usefully elucidates the precise sense of γνῶσις in ecclesiastical writers. His *Excerpta ex Theodoto of Clement*

of *Alexandria* is reviewed by A. SOUTER, *Cl. Rev.* 49 (1935), 41, E. B., *Religio* 11 (1935), 180-1, O. STÄHLIN, *Theol. Lit.-Z.* 56 (1935), 414-16, and together with O. STÄHLIN, *Clemens Alexandrinus*, IV, i (first part of index; also reviewed by P. KOETSCHAU, *ibid.* 199-200), and R. P. BLAKE, *Epiphanius de gemmis* (also rev. by G. KRÜGER, *ibid.* 142-3, A. SOUTER, *Cl. Rev.* 49 (1935), 42, P. B., *Religio* 11 (1935), 92, by [A.], *Rev. Bibl.* 44 (1935), 308-11, KLOSTERMANN-BENZ, *Origenes Werke*, XL Bd. by W. BAUER, *Theol. Lit.-Z.* 60 (1935), 344-5.

To recapture the spirit of mature Christian antiquity, O. CASEL, *Das christliche Kultmysterium* (2nd ed., Pustet, Regensburg, pp. 175, 1935), is invaluable; a very beautiful and learned book (note 104 ff. on *sacramentum*).

Other articles to be noted in this section are: G. GHEDINI *Frammenti liturgici in un papiro milanese* (*Aeg.* 13 (1933), 667-73). C. DEL GRANDE, *Liturgiae preces hymni Christianorum e papyris collecti* is reviewed by P. COLLART, *Rev. ét. gr.* 48 (1935), 337, *Rev. de phil. n.s.* 9 (1935), 102-3, B. RYBA, *Listy filolog.* 60 (1933), 354'. R. D. MIDDLETON writes on *The Eucharistic Prayers of the Didache* (*J. Theol. Stud.* 36 (1935), 259-67), H. J. GIBBINS on *The Problem of the Liturgical Section of the Didache* (*ibid.*, 373-86). DE LACY O'LEARY publishes *A Greek Hymn in a Coptic Manuscript* (*Orientalia*, n.s. 3 (1934), 201-4), H. G. OPITZ, *Euseb v. Caesarea als Theologe* (*Z. neut. Wiss.* 34 (1935), 1-19), A. SOUTER, *Lexical Notes on the Writings of Synesius of Cyrene* (*J. Theol. Stud.* 36 (1935), 176-8). A. BLUDAU, *Die ägyptischen Libelli in die Christenverfolgung des Kaisers Decius*, is reviewed by J. ZKILLER, *Rev. de phil. n.s.* 9 (1935), 401-2; F. J. DÖLGER, *Antike u. Christentum* III, IV, by E. WEIGAND, *Gnomon* 11 (1935), 497-503, IV (1934), 3-4, by A. D. NOCK, *J. Theol. Stud.* 36 (1935), 200-1 (material on sacred dance); H. G. E. WHITE-W. HAUSER, *The Monasteries of the Wādi 'n Natrun* by K. CONANT, *AJA* 39 (1935), 638-9; C. A. BAYNES, *A Coptic Gnostic Treatise*, by W. BAUER, *Theol. Lit.-Z.* 60 (1935), 104-5; P. DE LABRIOLLE, *La réaction païenne* by M.-J. LAGRANGE, *Rev. Bibl.* 44 (1935), 606-9, H. KOCH, *Theol. Lit.-Z.* 60 (1935), 359-61 (also by A. DIÈS, *La polémique antichrétienne du I^e au VI^e Siècle*, *Bull. Ass. Budé*, no. 46, Janvier 1935, 37-45); E. SCHWARTZ, *Publizistische Sammlungen* by H. KOCH, *ibid.*, 117-21; H. G. OPITZ, *Athanasius' Werke*, III, by G. KRÜGER, *ibid.* 453-5.

For later development I must refer to the wonderful bibliography by N. H. BAYNES, F. DÖLGER, and others in *BZ* 35 (1935), 150-272, 442-512, and to M. HOMBERT's very serviceable *Bulletin papyrologique* VIII (1933-4) (*Byzantion* 10 (1935), 341-66); I have received a reference to W. DEROUAUX, *Littérature chrétienne antique et papyrologie* (*Nouvelle revue théologique*, 1935, 810-43). HIPPOLYTE DELEHAYE, *Cinq leçons sur la méthode hagiographique* (*Subsidia hagiographica*, XXI (1934). Société des Bollandistes, 24 Boulevard Saint-Michel, Bruxelles, pp. 147), is admirable, like everything from his pen—on the way in which a saint must be given his place in history, on cultus and story, on the formation of calendars and martyrologies, on the development of the veneration of relics, on the iconography of the saints (e.g. 119 ff. on the *nimbus*). Perhaps some attention should be drawn to ancient physiognomic theory, on which cf. now E. C. EVANS, *Harv. Stud. Class. Phil.* XLVI (1935), 43 ff.). The Bollandist tradition is being worthily maintained; witness F. R. HALKIN, *Publications récentes de textes hagiographiques grecs* (*Analecta Bollandiana* 53 (1935), 366-81), a most useful critical survey of recent investigations. Here, too, the new workers are emerging. ROGER A. PACK, *Studies in Libanius and Antiochene Society under Theodosius* (Diss. Michigan, 1935, pp. xi+126), is a very fine contribution to our knowledge of the later 4th century, and in particular to Libanius, as a figure of the transition from the old world to the Middle Ages; it is as good in detail as in synthesis. Meanwhile J. BIDEZ shows his proved skill and divinatory faculty in *Le texte du prologue de Sozomène et de ses chapitres* (VI, 28-34) *sur les moines d'Égypte et de Palestine* (*Sitzungb. Berlin*, 1935, 399-427); with pp. 426-7 on hymns as a monastic concern, cf. the chapter, 'Hermit poetry', pp. 93-109 of KENNETH JACKSON, *Studies in Early Celtic Nature Poetry* (C. U. Pr., 1935, pp. xii+204, 12s. 6d.), a fascinating and beautiful study in comparative literature.

FRANCIS CRAWFORD BURKITT (*J. Theol. Stud.* 36 (1936), 225-54), to which A. SOUTER, R. H. CONNOLLY, S. A. COKE, G. R. DRIVER, B. H. STREETER, H. LOEWE, C. MONTEFIORE, E. C. RATCLIFF, and G. G. COULTON contributed sections, is not only a worthy tribute to one of the greatest scholars of all time but also a most important statement of the progress of those studies to which Burkitt contributed so greatly.

3. Publications of Non-Literary Texts

A. GENERAL

Two excellent editions of ostraca have recently appeared. The first group, collected at Elephantine and Thebes in the '80's by an American traveller, is edited by Mlle CLAUDE PRÉAUX: *Les Ostraca grecs de la*

Collection Charles-Edwin Wilbour au Musée de Brooklyn, Brooklyn Museum, New York, 1935, pp. 125, 2 pls. The texts themselves are mostly of familiar types, and the main interest and importance of the book lies in the admirable introductory essays to each group of receipts, and in the conscientious commentary, recalling in both respects Amundsen's *Ostraca Osloënsia*. Particularly important is the discussion of the origin of *λαογραφία*; Mlle Préaux stresses the dubiety of the Ptolemaic evidence, which she eventually rejects, returning to the old view that it was instituted by Augustus. Reviewed by O. GUÉRAUD, *Chron. d'Ég.* 10 (1935), 388-92, and W. SCHUBART, *OLZ* 38 (1935), 483-4.

The second volume publishes some 700 ostraca from the Fayyûm, in part collected by Dr. Askren, but mostly from the University of Michigan's excavations on the site of Karanis. Only the first volume, containing the texts (complete with indices) has appeared, and it is to be hoped that vol. II (the commentary) will not be unduly delayed. Most of the ostraca date from the late third to the early fourth century A.D., and the editor's analysis will be eagerly awaited. L. AMUNDSEN, *Greek Ostraca in the University of Michigan Collection*, Part I: Texts. Ann Arbor, University of Michigan Press, 1935, pp. xx+232, 8 pls. Noticed by T. C. SKEAT, *Cl. Rev.* 49 (1935), 228-9.

G. MANTEUFFEL has produced the final edition of the small collection of papyri and ostraca in Warsaw: *Papyri Varsovienses* (= *Universitas Varsoviensis: Acta Facultatis Litterarum* I). Varsoviae, 1935, pp. xii+69, 4 pls. 49 papyri, mostly very mutilated, and 4 ostraca are published or republished; the majority date from the second and third centuries A.D., and are of well-known types—receipts, loans, leases, accounts, private letters, and the like. The volume is well produced, with careful introductions and commentaries, but unfortunately the reading of the texts themselves cannot always be relied on. Reviewed by H. I. BELL, *Cl. Rev.* 49 (1935), 241 (important corrections to P. Varsov. 10, 12, 19).

Two small anthologies of papyrus texts have been recently published. The first (not seen), is edited by MICHEL HOFFMANN, *Antike Briefe: Lateinische und griechische Privatbriefe aus den Alltagsleben. Urtext und Übersetzung*. München, 1935, pp. 143. The second is primarily intended for students of the New Testament and Hellenistic Greek: EDGAR J. GOODSPEED and ERNEST CADMAN COLWELL, *A Greek Papyrus Reader with Vocabulary*. Chicago, 1935, pp. vii+108.

Papyri Groninganae (*JEA* 20, 91-2) is reviewed by H. KORTENBEUTEL in *Gnomon* 11 (1935), 442-4; K. FR. W. SCHMIDT in *GGA* 197 (1935), 311-17; P. COLLART, *Rev. de phil.* 9 (1935), 103-4.

P. JANDA VI (*JEA* 21, 84) has received appreciative notices from G. GHEDINI, *Riv. di fil.* 13 (1935), 104-5; O. MONTEVECCHI, *Boll. fil. class.* 6 (1934), 22-5; U. WILCKEN, *Archiv* 11 (1935), 297-8.

P. JANDA VII has been reviewed by U. WILCKEN, *Archiv* 11, 296-7; H. C. YOUTIE, *Cl. Phil.* 30 (1935), 281-3 (important; identifies P. Jand. 141 as col. 108 of a long roll at Michigan); H. I. BELL, *Cl. Rev.* 49 (1935), 181.

EDGAR and HUNT's *Select Papyri*, vol. II (*JEA* 21, 85) is reviewed by W. M. CALDER, *Cl. Rev.* 49 (1935), 72-3, and K. FR. SCHMIDT, *Phil. Woch.* 55 (1935), 1007-8.

U. WILCKEN refers to his own edition of P. Würzburg (*JEA* 21, 84) in *Archiv* 11, 298-9, recording a number of minor corrections in P. Würzb. 9. G. SOYTER, *Die byz. Papyri der Würzb. Univ.-bibl., Izv. Blgarskaya Arkheol. Inst.* 9 (1935), has some notes on the language and orthography of the Byzantine papyri.

I have not seen what appears to be an advance extract from the long-promised *Papiri Milanesi* under the editorship of G. VOGLIANO: *Dal I° volume dei papiri della R. Università di Milano*. Florence, 1935. Included are two documentary papyri, 'Letter from Theon to Heraclides', published by Vogliano, and a contract of cession of catocic land, by Jouguet.

B. PTOLEMAIC

The outstanding event has been the appearance of the first fascicule of *UPZ* II. More than half is devoted to the famous 'Choachyten-Akten', beginning with the law-suit of Hermias. U. WILCKEN, *Urkunden der Ptolemäerzeit (Ältere Funde). Zweiter Band: Papyri aus Oberägypten. 1. Lieferung*, W. de Gruyter, Berlin and Leipzig, 1935, pp. iv+89. Reviewed by W. SCHUBART, *D. Lit.-Z.* 6 (1935), 1073-4.

O. GUÉRAUD's *Épigraphes* (*JEA* 18, 84; 19, 74) is reviewed by H. KORTENBEUTEL in *D. Lit.-Z.* 5 (1934), 2075-8. In reviewing BGU VIII (*JEA* 20, 89), in *Hist. Z.* 152 (1935), 539-46, W. OTTO makes some weighty general observations on the editing of collections of papyri.

No new editions of Zenon papyri have appeared, but there are a number of reviews to be recorded. P. Mich. Zen. (*JEA* 18, 84) has been reviewed by E. S. HASENOHR in *Cl. Weekly* 24 (1934-5), 205-6. P. Ryl. Zen. (*JEA* 21, 85-6), by U. WILCKEN, *Archiv* 11, 290. P. Col. III (= P. Col. Zen.) has been widely

noticed: by U. WILCKEN, *Archiv* 11, 286-90; H. C. YOUTIE, *Am. Journ. Phil.* 56 (1935), 175-80; C. C. EDGAR *JEA* 21, 122-3 (all these three make important corrections and comments). Also reviewed by W. SCHUBART, *Gnomon* 11 (1935), 423-6, and B. A. VAN GRONINGEN, *Museum* 42 (1934-5), 261-2.

P. Teb. iii. 1, is reviewed by H. KORTENBREUTEL in *GGA* 197 (1935), 227-32.

The so-called 'P. Baraize', published by P. COLLART and P. JOUGUET in *Ét. de pap.* ii¹ (*JEA* 21, 86) is discussed by U. Wilcken, *Archiv* 11, 292-4 (important remarks on the strategus Daimachos, and on P. Grenf. i, 11, which, with J. G. Tait, he now assigns to the reign of Epiphanes; in this case it seems better to assign the fragments mentioning Daimachos in connexion with the 4th year to the beginning of Philometor's reign than to postulate, as Wilcken does, two strategi of the same name). WILCKEN also reviews (*ibid.* 291-2) A. CALDERINI, *Un nuovo papiro del Serapeo di Memfi* (*JEA* 21, 86).

C. PTOLEMAIC-ROMAN

U. WILCKEN reviews E. ZIEBARTH, *Aus der Hamburger Papyrussammlung* (*JEA* 21, 87), in *Archiv* 11, 295-6, and G. COPPOLA, *Papiri Bononienses* (*JEA*, Lc.), *ibid.* 294-5.

D. ROMAN

N. HOHLWEIN has printed an attractive selection from the unpublished papyri in the Cairo Museum in *Mél. Maspero* 2, 17-31. The first, a letter of instructions from the Prefect Flavius Titianus to Chaeremon, strategus of the Heracleopolite nome (A.D. 126-33 or 164-7), is of great interest from the point of view of administrative history; the third is an attractive private letter from a woman to her husband; the fourth a summons to the *conventus* of the Prefect L. Volusius Maecianus (c. A.D. 160), at Antinoë, hitherto unattested as an assize town. Reviewed by C. PRÉAUX, *Chron. d'Ég.* 10 (1935), 396-8.

A selection of papyri belonging to the Società Italiana is published (with very meagre comments) by pupils of Vitelli in *Aeg.* 15 (1935), 207-29. They include a declaration on oath, a fragmentary petition, an application for admission to the *δωδεκάδραχμοι*, a lease, five private letters, and a sale. Except the last-named (Antinoë, A.D. 430), all are from Oxyrhynchus and date from the second and third centuries. A similar selection, in *Studi italiani di filologia classica*, n.s., 12 (1935), 92-110, includes, along with several literary papyri, a fragmentary will (2nd cent.) and a petition to the *ἐπιστηγὴς ξενικῆς πρακτορείας* (A.D. 210). These are also from Oxyrhynchus.

In *Dai papiri della Raccolta Milanese*, *Aeg.* 15 (1935), 239-54, the Telephus prologue is followed by a fragmentary loan (1st-2nd cent.), edited by A. CALDERINI, and two private letters (2nd and 3rd cents. respectively), edited by LYDIA BANDI.

Two well-preserved documents from the little Warren collection (see *JEA* 21, 104) have been edited by A. S. HUNT: *P. Warren 8-9*, in *Mél. Maspero* 2, 9-14. The one is an agreement to pay arrears of rent due to a Roman landed proprietor, M. Antonius Aper (Philadelphia, A.D. 86); the other is a receipt for repayment of a loan (Theadelphia, A.D. 109).

A. E. R. BOAK, *A Petition addressed to Apollonios, Strategos of Heptakomia* (P. Mich. inv. 6629), in *Aeg.* 15 (1935), 265-6, publishes a recently acquired specimen from a well-known archive. It is a summons to attend the *conventus* of the Prefect Haterius Nepos, a fact which points to Apollonius having remained in office at least as late as A.D. 120.

C. W. KEYES, *Four Private Letters from the Columbia Papyri*, *Cl. Phil.* 30 (1935), 141-50, edits four typical specimens of epistolography of the first and second centuries, with excellent notes and comments. Four more letters, of the second to fourth centuries, together with a sale of c. A.D. 300, are the contents of *Briefe und Urkunden aus der Berliner Papyrussammlung*, published under Schubart's guidance by ELIZABETH VISSER in *Aeg.* 15 (1935), 267-76. The note on *ἐπαφή* on p. 276 is worth special attention.

Fifteen customs receipts of the reigns of Severus and Caracalla, found during the University of Michigan's excavations at Dimē, are published in A. E. R. BOAK's report on the campaign: *Soknopaiou Nesos*, 20-3 and Pl. xiii, where six of the best specimens are reproduced. The desperately cursive writing is valiantly, and on the whole successfully, tackled by the editor, who pays special attention to the well-preserved seals still attached to some of the receipts.

In the course of his latest *Urkunden-Referat*, in *Archiv* 11, 299-311, U. WILCKEN comments on the following: BELL, *Diplomata Antinoitica* (*JEA* 21, 87); BOAK, *A Petition to an Exegetes* (*ibid.* 20, 90); GAPP,

¹ For reviews of *Ét. de pap.* ii as a whole, see § 9 below.

A Lease of a Pigeon-house with Brood (ibid. 21, 87); HARMON, *Egyptian Property Returns* (ibid. 21, 87-8); MARTIN, *A Greek Papyrus Letter to a Student* (ibid. 19, 77); PETROPOULOS, *An Unpublished Greek Papyrus of the Athens Collection* (ibid. 21, 87); RABEL, *Eine neue Vollmachtsurkunde*; ZAMBON, *Minute di un contratto di servizio nella raccolta milanese* (ibid. 21, 88). WINTER, *An Illiterate Private Letter of the Second Century*. I regret that the articles of RABEL and WINTER were accidentally omitted from this section last year.

P. Col. ii (JEA 19, 75) is reviewed by H. VAN HOESSEN, *Am. Journ. Phil.* 56 (1935), 167-70.

P. Mich. ii (JEA 20, 90) is reviewed by U. WILCKEN, *Archiv* 11, 30-3, and A. C. JOHNSON, *Am. Hist. Rev.* 40 (1934-5), 480-3.

E. ROMAN-BYZANTINE

P. Berl. Leihg. (JEA 19, 77) is highly praised in an important review by F. ZUCKER, *Gnomon* 11 (1935), 368-74 (excellent and detailed summary).

C. H. ROBERTS, *Two Papyri from Oxyrhynchus* (JEA 21, 88), is reviewed by U. WILCKEN in *Archiv* 11, 311-12.

F. BYZANTINE

A. E. R. BOAK, *The Date of the Establishment of the Office of Praepositus Pagi in Egypt*, in *Mél. Maspero* 2, 125-9, publishes a papyrus in the Cairo Museum. It is a nomination by the two retiring comarchs of Karanis of their successors for the ensuing year, dated A.D. 308, and addressed Ἀρχηλίου Ἡρακλεῖδῃ πραιποσίτῳ. Boak points out that this can be no other personage than the *Praepositus pagi*, and shows from other unpublished papyri (dated A.D. 316 and 320) that ἐπαγοῦ may be restored with practical certainty at the end of the address. Wilcken's date for the institution of the office, in the reign of Maximinus, between A.D. 307-10, is thus strikingly confirmed.

Mlle G. ROUILLARD has printed an interesting document from the Weill collection in Paris, pending the final publication by herself and Collart: *Prêt de Grains*, A.D. 497, in *Mél. Maspero* 2, 177-84, with plate. In lieu of repayment of a loan of grain, the borrower, comarch of Magdola Bucolôn in the Hermopolite nome, concedes the use of 1 aroura of his land for one year, he himself, as it seems, providing the labour, while the creditor supplies the seed only. Though the details of the transaction are somewhat obscure, the vital word at the end of l. 26 being hard to decipher, the main situation is clear, and provides an interesting example of one way in which small holdings might fall into the hands of the great landed proprietors. No less interesting is Mlle Rouillard's note on the χμγ formula which heads the document; from unpublished Weill papyri she quotes alternative forms such as χμγαιθ, χμγαιθ, which effectually dispose of the isopsephism theory, and favour the explanation that the letters are initials of some Christian invocation.

From Berlin C. H. ROBERTS publishes in JEA 21, 52-6, *Two Letters of the Byzantine Period*. The first is an amusing letter from a father (?) regarding his small son, whose education his correspondent had apparently undertaken. He now writes to say that the boy having proved intractable (μῶρος καὶ παιδιὸν καὶ ἀνόητος), he will remove him. The concluding admonition will doubtless often be quoted: καὶ σωφρονήσητε αὐτόν, ἐπειδὴ ἔξοτε ἀπέστη ἐκ τοῦ πατρὸς αὐτοῦ ἄλλας πλῆγας οὐκ ἔλαβεν, καὶ θέλει ἄλλας λαβεῖν ἥθεισθαι γὰρ ὁ νῶτος αὐτοῦ καὶ τὴν συνήθειαν ζητεῖ. The other letter, apparently written somewhere in the Delta, is mainly concerned with business affairs, but has an interesting reference to soldiers in the Mareotic nome.

BOAK, *Early Byzantine Papyri from the Cairo Museum* (JEA 21, 88-9), is reviewed by U. WILCKEN, *Archiv* 11, 312-13 (see also § 4 below).

KASE, *A Papyrus Roll in the Princeton Collection* (JEA 21, 89) is also reviewed by WILCKEN, *Archiv* 11, 313-14, and by K. FR. W. SCHMIDT, *Phil. Woch.* 35 (1935), 1370-1.

4. Political History, Biography, Administration, Topography, Chronology

A. GENERAL

In F. HEICHELHEIM's review of *Griechische Staatskunde von 1902-32* (*Bursian Supplementband*, 250) the Hellenistic monarchies are treated in ch. vii, pp. 244-77. P. JOUGUET has an interesting article on *Les destinées de l'hellénisme dans l'Égypte gréco-romaine* in *Chron. d'Ég.* 10 (1935), 89-108: and there is a valuable collection of evidence on *L'ethnographie égyptienne d'après les signalements contenus dans les papyrus* by P. COLLOMP in *Bulletin Budé* 49 (1935), 52-8.

B. POLITICAL HISTORY

P. JOUGUET, in *Le roi nubien Hurgonaphor et les révoltes de la Thébaine*, in *Mélanges O. Navarre* (Toulouse, 1935), 265-73, discusses the evidence recently obtained; and H. HENNE proposes a solution of a chronological problem in *Note sur le début du règne conjoint de Philométor et d'Evergète II* in *Rev. et. anc.* 37 (1935), 467. A study of *La Syrie et la Palestine au temps de Ptolémée I Soter* is begun by F. M. ABEL in *Rev. bibl.* 44 (1935), 559-81.

W. D. HOGARTH has translated A. MOMIGLIANO's *Claudius* (see *JEA* 19, 79): it is reviewed by E. HOHL in *Phil. Woch.* 55 (1935), 18, and by J. P. V. D. BALSDON in *Cl. Rev.* 48 (1934), 157. Other reviews to be noted are, by C. J. KRAEMER JR. in *Cl. Weekly* of G. H. MACURDY's *Hellenistic Queens* (see *JEA* 20, 93); and by W. W. T(ARN) in *JHS* 55 (1935), 98-9, by E. HOHL in *Hist. Z.* 152 (1935), 323-5, and by H. VOLEMANN in *Phil. Woch.* 55 (1935), 1227-32, of W. OTTO's *Geschichte der Zeit des 6. Ptolemäers* (see *JEA* 21, 89).

H. MATTINGLY uses the evidence of Alexandrian coin-dates in his reconstruction of the chronology of *The Reign of Aemilian* in *JRS* 25 (1935), 55-8.

C. BIOGRAPHY

I have not seen U. AMMIRATO's *Cleopatra* (Milan, 1934).

D. ADMINISTRATION

The interest of E. BERNEKER's *Die Rolle des Strategen im Verfahren vor den ptolemäischen Kollegialgerichten* in *Mélanges Maspero* 2, 1-8 is largely legal; it is reviewed by C. PRÉAUX in *Chron. d'Ég.* 10 (1935), 409-10. The reviewer writes *Réflexions sur les droits supérieurs de l'État dans l'Égypte lagide* in the same volume, 109-19.

O. W. REINMUTH has given an exhaustive survey of the material relating to *The Prefect of Egypt from Augustus to Diocletian* in *Klio*, Beiheft 34 (1935); and S. AVOGADRO of that on *Le ἀπογραφαὶ δι' ἐκτελέσεως nell'Egitto greco-romano* in *Aeg.* 15 (1935), 131-206. A. E. R. BOAK's publication of *A Petition Addressed to Apollonios Strategos of Heptakomia* (*ibid.* 265-6) is instructive.

The discussion of the Ptolemaic military administration in *The Mercenaries of the Hellenistic World*, by G. T. GRIFFITH (Cambridge, 1935) is excellent.

HARMON's *Egyptian property returns* (see *JEA* 21, 87), is reviewed by C. PRÉAUX in *Chron. d'Ég.* 10 (1935), 393-6, by S. AVOGADRO in *Aeg.* 14 (1934), 479-81, and by U. WILCKEN in *Archiv* 11 (1935), 304-5. W. MATTHES's *Prosopographie der Aeg. Delta-gaue* (see *JEA* 21, 90), is reviewed by P. COLLART in *Rev. de phil.* 9 (1935), 310-11.

E. TOPOGRAPHY

The first part of a *Dizionario dei nomi geografici e topografici dell'Egitto greco-romano* has been published by A. CALDERINI; it contains entries *A-Αλκαπρασσεως*. It is reviewed by O. MONTEVECCHI in *Boll. filol. class.* 7 (1935), 58-60; it should prove most valuable. A list of corrections to this part is printed by CALDERINI in *Aeg.* 15 (1935), 321-27.

In *Soknopaiou Nesos*, by A. E. R. BOAK (Ann Arbor, 1935), pp. 1-21, there is an account of the topographical results of the Michigan University excavations at Dimē in 1931-2.

E. ZIPPERT summarizes G. BAGNANI's account of *Tebtynis* in *Arch. f. Orientf.* 10 (1935), 193-4.

A. DE COSSON has published *Mareotis, being an Account of the History, Topography and Antiquities of the North-Western Desert of Egypt and Lake Mareotis*, London, 1935, pp. ix+219, with 21 sketch-maps and plates. The photographs provided by Dr. Henry Maurer of Alexandria are well reproduced, and there is an appendix on the wild flowers of Maryūt.

F. BYZANTINE PERIOD

The one outstanding general work is H. ST. L. B. MOSS, *The Birth of the Middle Ages 395-814*, Oxford, Clarendon Press, pp. xviii+291, with sketch-maps and good illustrations. There are useful discussions of historical problems in J. MILLER, *Bericht über die Literatur zur Geschichte des römischen Reiches in der Zeit von Diocletian bis Theodosius I 284-395 n. Chr. aus den Jahren 1915-1932*. *Bursian* 61 (1935), Bd. 246 pp. 43-130.

For the ecclesiastical background: C. PAPADOPOULOS *Ἱστορία τῆς ἐκκλησίας Ἀλεξανδρείας* (62-1934), Alexandria, 1935. Rev. by J. LEBON, *Rev. d'hist. ecclési.* 31 (1935), pp. 777-9.

On A. E. R. BOAK, *The Date of the Establishment of the Office of Praepositus Pagi*, see § 3 F above. He produces evidence to show that the office was in being by A.D. 308.

A. FIGANIOL has reconsidered *La Capitation de Dioclétien*, *Rev. hist.* 176 (1935), 1-13, on the basis of the Karanis papyrus published by BOAK (*JEA* 21, 88-9). This is an important article: P. concludes 'que l'édit de 297 est défavorable aux théories qui fusionnent la *jugatio* et la *capitatio* de Dioclétien en un impôt unique—qu'il est favorable en apparence aux théories issues de Savigny, qui affirment la distinction d'une capitation personnelle et d'une capitation foncière,—mais que les difficultés des textes ne peuvent être résolues que par une théorie, qui, à la suite de Rodbertus, admet l'équivalence entre les unités fiscales des deux capitations. Malheureusement, l'édit de 297 ne nous permet pas d'affirmer que cette équivalence ait été introduite d'emblée par Dioclétien en Égypte'. On this papyrus cf. U. WILCKEN, *Archiv* 11 (1935), 312-13; after reaching independently Edgar's correction of [ὄν] for [κατ] in l. 9 (*JEA* 21, 89) he points out that the words κεφαλὴ τῶν ἀγροτικῶν settle a long disputed problem: 'der Text bestätigt die Angabe Constantins in C. Theod. XIII 10, 2, dass unter Diokletian die *plebs urbana immunis fuerat* (bezüglich der capitation)'; he considers that the 'Motivierung' of the measure given by the prefect is taken from the imperial edict: 'danach war es die Willkür, die vorher in der Besteuerung bestanden hatte, die der Kaiser im Interesse der Wohlfahrt der Provinzialen durch die Neuordnung beseitigen wollte' (cf. *ἐκπεργηθέντες* 10, *μεγαλοδορία* 17). If Wilcken is right in this suggestion, it is of the first importance for the understanding of Diocletian's fiscal policy.

A. FIGANIOL suggests that in the calculation of a caput and a sixth found in P. Lond. Inv. 2574 published by H. I. BELL, *Mé. Maspero* 2, 105 (*JEA* 21, 89), we should see a case of a *superindictio* of one sixth. *Rev. hist.* 176 (1935), p. 13, n. 1.

In his introduction to P. Würzb. 15 (*JEA* 21, 84) U. WILCKEN now declares himself convinced that the *χουράντης* there mentioned is identical with the officials of that name otherwise known only in the eighties of the fourth century; the office was therefore in existence by A.D. 335.

For an encomium on an Emperor who is probably Julian the Apostate (Pap. Vind. 29834) cf. U. WILCKEN, *Archiv* 11 (1935), pp. 270-1. Cited here for reference to the administration.

E. SEIDL'S *Der Eid im römisch-ägyptischen Provinzialrecht*, Part 2 (on which see § 6) primarily concerns students of Roman law, but it is of more general interest. Here in the forms of oath prescribed by the government can be traced one aspect of the great transition from the pagan to the Christian state. The discussion, e.g., of the titles *κύριος* and *δεσπότης*, of the imperial *τύχη* and *νίκη*, of the adjective *θεῖος*, is full of suggestion for the historical student. Here, too, is reflected the *δομολογία* enjoyed by the consorts of the emperors from Tiberius II to Heraclius. For a possible case of an oath by the *ἀρετή*—the *virtus*—of the emperor cf. *Aeg.* 15 (1935), 273-4.

Students of Roman history should not overlook the highly suggestive studies of CLAIRE PRÉAUX. In these papers she is writing on conditions in Ptolemaic Egypt, but they form valuable material for comparative study. The difficulties of securing adequate man-power for agriculture and other essential services are vividly illustrated from the papyri in *Réflexions sur les droits supérieurs de l'état dans l'Égypte lagide*, *Chron. d'Ég.* 10 (1935) 109-19, and in *La difficulté de requérir le travail dans l'Égypte lagide*, *ibid.* 343-60. These studies help us to understand the reasons for the gradual introduction of the colonate as a legal status in the Roman Empire of the fourth century. A brilliant paper *Politique de race ou politique royale?*, *Chron. d'Ég.* 11 (1936), 111-38, is devoted to the problem confronting a sovereign who, in default of adequate supplies of money, is forced to reward his servants by grants of land. Mlle Préaux might well have referred to the classical study of this problem—L. H. HARTMANN'S *Ein Kapitel vom spätantiken und frühmittelalterlichen Staate* (1913). To the student of Roman history Mlle Préaux has provided material for comparison with the working of the system of *pronoia* and with the effect of grants made to *charisticarii*.

G. HANOTAUX, *Histoire de la nation égyptienne*, III.—Review by R. WEILL, *Rev. critique* 68 (1934), 29-31, by P. COLLART, *Rev. ét. gr.* 48 (1935), 163-5, by M. ENGERS, *Museum* 42 (1934-5), coll. 217-20, by G. DE JERPHANTON, *Orientalia Christiana periodica* 1 (1935), 547-8.

5. Social Life, Education, Economic History, Numismatics, Metrology

A. SOCIAL LIFE AND EDUCATION

ORSOLINA MONTEVECCHI has begun what, it is hoped, will be a series of *Ricerche di sociologia nei documenti dell'Egitto greco-romano* with one on *I testamenti* in *Aeg.* 15 (1935), 67-121; in the same volume, 3-66,

is an article by ANGELA ZAMBON on *Didaskalikai*. WINTER's *Life and Letters* (see *JEA* 20, 93) is reviewed by G. GHEDINI in *Aeg.* 15 (1935), 334-5, by W. M. CALDER in *Cl. Rev.* 49 (1935), 72-3, by W. MILLER in *Cl. Journ.* 30 (1934), 114-16, by O. MONTEVECCHI in *Boll. fil. class.* 6 (1934), 22-5, and by W. A. OLDFATHER in *Am. Hist. Rev.* 40 (1935), 362-3. E. M. ANTONIADI's work, *L'astronomie égyptienne depuis les temps les plus reculés jusqu'à la fin de l'époque alexandrine* (Paris, 1934), should be noticed here: it is reviewed by R. W. SLOLEY in *JEA* 20, 221-2.

B. ECONOMIC HISTORY

F. HEICHELHEIM has summarized *New Light on Currency and Inflation in Hellenistic and Roman Times from Inscriptions and Papyri* in *Economic History* 3 (1935), 1-5. An article entitled *In Roman Egypt*, by ETHEL H. BREWSTER, in *Cl. Weekly* 29 (1935), 25-9 deals with a weaver of Oxyrhynchus. A Hamburg dissertation by E. LEIDER on *Der Handel von Alexandria* is only known to me from a review by W. W. TAEN in *Cl. Rev.* 49 (1935), 154-5. Other reviews of works already noticed are: of A. ANDRÉADÈS, *Droits de douane* (see *JEA* 20, 94), by E. BRECCIA in *Bull. Soc. Arch. d'Alex.* 29 (1934), 367-71; of E. GRIER, *Accounting in the Zenon papyri* (see *JEA* 21, 85), by L. BANDI in *Aeg.* 14 (1934), 481-8, by R. A. MACDONALD in *Liverpool Annals of Archaeology and Anthropology* 22 (1935), 131-3, by O. MONTEVECCHI in *Boll. fil. class.* 6 (1935), 300-1, by C. PRÉAUX in *Chron. d'Ég.* 10 (1935), 384-7, by W. SCHURABT in *Gnomon* 11 (1935), 426-8, and by U. WILCKEN in *Archiv* 11 (1935), 290; for reviews of N. LEWIS, *L'industrie de papyrus* (see *JEA* 21, 90), cf. § 7 below.

C. NUMISMATICS AND METROLOGY

R. A. HAATVEDT describes the coins found at Dimē in A. E. R. BOAK's report on *Soknopaiou Nesos* (see § 4 E above), pp. 37-47. J. G. MILNE writes on 'Phocæan Gold' in *Egypt* in *JEA* 20 (1934), 193-4. A. SEGRÈ contributes *Nuovi appunti metrologici* to *Symb. Oslo* 13 (1934), 68-73.

D. BYZANTINE AND ARAB

The most important book published during the year is perhaps that of H. ZILLIACUS, *Zum Kampf der Weltsprachen im oströmischen Reich*, Helsingfors, 1935, pp. 239. For the papyrologist the most interesting chapters are ch. 4, *Das juristische Leben* (with a special section devoted to Egypt); ch. 5, *Die Latinismen in der juristischen Fachterminologie*; ch. 6, *Das Militärwesen*; ch. 7, *Die Latinismen in der byzantinischen Militärterminologie*, and the Appendix giving *Verzeichnisse der Latinismen in der byzantinischen Rechts- bzw. Militärterminologie*. Throughout the book the exceptional position of Egypt within the Empire is emphasized; the following sentences may be cited here: 'Wenn wir nun unsere Untersuchungen über die Gerichtssprache in Ägypten zusammenfassen, so konstatieren wir, dass seit dem Beginn des 4. Jahrhunderts das Lateinische als amtliche Sprache im Rechtswesen eingeführt worden war, in der ersten Zeit scheinen sogar die Urteile auch für Parteien mit griechischer Muttersprache lateinisch verkündet zu sein. In der Folgezeit bildet sich dann die Praxis aus, die bis in d. 6. Jahrh. befolgt zu sein scheint, nämlich, dass die Muttersprache der Parteien nicht nur bei der Abfassung des Rechtspruchs sondern auch für die Verhandlungen ausschlaggebend war, was in der Praxis eine Alleinherrschaft des Griechischen in dieser Hinsicht bedeuten dürfte. Als Protokoll- und interne Amtssprache dominiert auch an den niederen Gerichtshöfen in der Provinz das Lateinische die ganze Zeit hindurch d. h. etwa bis zum J. 530, mit dem unsere Quellen aufhören' (p. 95).

A. ANDRÉADÈS † has discussed the question of the number of *La Population de l'Empire byzantin*, *Izvestiya na B'lgarskiya Arkheologicheski Institut* 9 (1935), 117-26. This paper is for the most part a resumption of the arguments contained in the well-known article published in *Metron* 1 (1920). On the basis of Edict 13, c. 8 of Justinian—8 million artabas (= 20½ millions of Roman modii) of grain imported from Egypt to Constantinople—A. calculates for the capital a population of at least 700,000.

W. HENGSTENBERG has published an important paper—*Bemerkungen zur Entwicklungsgeschichte des Ägyptischen Mönchtums*, *Izvestiya na B'lgarskiya Arkheologicheski Institut* 9 (1935), 355-62. For the *Sarabaites*—a term which he would derive from the Coptic Sa-n-awēt, the 'r' being a 'Verschreibung' for 'n'—he compares the conditions of life implied by Preisigke, S.B. 5174 and 5175 (A.D. 512 and 513); in the second of these papyri he would take Λαβλα as = Laura. H. discusses the Meletian documents published in H. I. BELL's *Jews and Christians in Egypt*, and compares the Berlin Coptic papyrus published by C. SCHMIDT in *ZÄS* 68 (1932), 60-8; he points out that in the will published by CRUM (KRU 75), and discussed by Steinwenter [*Z. Sav. Kan. Abt.* 19 (1930)] the 'Teilerbe' Elias is described simply as πικρός, i.e. a layman: this

must mean that Elias had brought money into the anchoritic settlement which the anchorites were not prepared to surrender.

P. Würzb. 16 (*JEA* 21, 84) is a surety-bond entered into by a Christian deacon for the appearance of a priest should further inquiries be instituted. It is remarkable that the deacon cannot sign his own name: a monk signs on his behalf.

W. DEROUAUX in *Littérature chrétienne et papyrologie, Nouvelle Revue théologique*, 1935, 810-43, gives a short history of papyrology and then considers the additions which the discovery of papyri has made to our knowledge of early Christian literature and in particular to our knowledge of the social life and beliefs of Egyptian Christians. This is an attractive supplement to Winter's *Life and Letters in the Papyri*.

E. R. HARDY, JUN., *The Large Estates of Byzantine Egypt* (1931).—Rev. by M. F. MCGREGOR, *Class. Phil.* 29 (1934), 360-1. M. V. LEVCHENKO, *K Istorii agrarnykh otnoshenii v Vizantii VI-VII vv. Po dokumentam vizantiiskogo Egipta. Problemy Istorii dokapitalisticheskikh Obshchestv* 5 (1935), No. 1-2, pp. 75-110. I have not as yet had an opportunity of studying this elaborate paper, based throughout on the papyri.

R. S. MACKENSEN in *Background of the History of Moslem Libraries, Am. Journ. Sem. Lang.* 51 (1934-5), 114-25; 52 (1935-6), 22-33 (to be continued) discusses the problem of the destruction of the Library of Alexandria by the Arabs. By the fourth century the Library was associated with the Serapeum and it was probably destroyed together with the Serapeum in A.D. 391. The lament of Orosius on the empty bookshelves is evidence that in 416 there were no longer any large and ancient libraries in Alexandria. It is suggested that the legend of the destruction of the Library by the Arabs arose amongst the Egyptian partisans of the house of 'Alī when Saladin in the twelfth century closed the academy and library maintained by the Fatimid caliphs at Cairo. A. GROHMANN in *Texte zur Wirtschaftsgeschichte Aegyptens in arabischer Zeit, Archiv Orientalni* 7 (1935), 437-72, pls. lii-lvii, has published 27 Arabic papyri from the eighth to ninth centuries which are of considerable economic interest, supplying evidence for the history of prices [*cf. ibid.* 5 (1933), 273-83; 6 (1934), 125-49].

P. Würzb. No. 20 is a Christian's statement of liability for tax—a *καταγραφή τῶν συντελουμένων* παρ' ἐμοῦ δημοσίων—from the Arab period and from the same period an *ἐπίσταγμα τοῦ σωματισμοῦ* (? 651-652) together with a similar *ἐπίσταγμα* from the fourth century (Nos. 18, 19). W. discusses the meaning of the term *σωματίζειν* and concludes that the essential feature of the transfer of property to which the word is applied is the transference of tax-liability to the new owner of the land.

For culture in Byzantine Egypt surprising evidence is to be found in a Latin parchment from Antinoe dating from c. A.D. 500 and containing ll. 149-98 of the seventh satire of Juvenal. C. H. ROBERTS, *A Latin Parchment from Antinoe, Aeg.* 15 (1935), 297-302. 'When we reflect that Juvenal was read in Upper Egypt, and in a good text at that, in an epoch during which, so we are accustomed to think, culture in Egypt was at a very low ebb, and read and commented on over a period of a hundred years, two conclusions may suggest themselves, the first that the influence of the φιλόσοφοι, the last champions of pagan culture, . . . was still surprisingly vigorous, and the second that in the whole field of papyrology it is hardly possible to find stronger testimony to the enduring vitality of Latin culture.'

I have not been able to see W. NESTLE, *Die Juden in der griechisch-römischen Welt. Aus Unterricht und Forschung*, 1935, 165-92.

I have also not seen G. MORAVCSIK, *Der Name der Bulgaren in einem griech. Papyrus. Körösi Csoma Archivum* 1, *Ergänzungsband*, 2. Heft 1935, 10 pp., 1 pl., on P.Vindob. gr. 2132. (Cited from the Brussels card index.). Possibly this is the papyrus published by WESSELY in *Mith. a. d. Sammlung Rainer* vi, 114, = *Stud. Pal.* xx, 133.

6. Law

A. GENERAL

(i) Bibliography, Necrology, Congresses.

(a) Bibliography.

U. WILCKEN, *Urkundenreferat, Archiv* 11 (1935), 284-317, A. CALDERINI, *Aeg.* 14 (1934) *Bibliografia metodica* 511-37 (*Diritto e amministrazione* 526-9) and *ibid.* 15 (1935), 344-81 (*Dir. e amm.* 367-9); also *Testi recentemente pubblicati, ibid.* 14, 473-8; 15, 305-19. *Chron. d'Ég.* 10 (1935), *Bibliothèque: Égypte gréco-romaine*, 188-94; 428-35. *BZ* 35 (1935), *Papyruskunde* 448-9, *Jurisprudenz* 507-9. P. COLLART, *Rev. ét. gr.*

48 (1935), *Bulletin papyrologique* (Documents, 565-71). F. OLIVIER-MARTIN, *Rev. hist. dr.* 14 (1935), suppl. with fasc. 4, *Bibliographie courante*, 1934, 41 pp. (economic and legal history in general); *Antiquité*, 8*-18*. M. HOMREKT, *Byzantion* 10 (1935), 341-66, *Bulletin papyrologique*, 1933-4 (*Droit, Administration*, 354-8). E. SEIDL, *Juristische Papyruskunde, Stud. et Doc.* 1 (1935), 450-5, includes only publications since Jan. 1, 1935. It is the first of a series of bibliographical articles which is to be continued in subsequent numbers of the new journal issued by the *Pontificium Institutum Utriusque Juris*. Greek and Latin legal papyri of Ptolemaic and Roman times are to be considered primarily, but references to the preceding and following periods and to allied papyrological studies, such as economic history, are not to be excluded.

(b) *Necrology.*

Notices of CH. APPLETON: by P. COLLINET, *Rev. hist. dr.* 14 (1935), 609-22 (with bibliography) and *Rev. arch.* 5 (1935), 259-60; by A. LEFRANC, *C.-R. Ac. Inscr. et B.-L.* (1935), 33-6. Notices of E. CUQ: by P. COLLINET, *Rev. hist. dr.* 14 (1935), 153-67 (with bibliography); by A. E. GIFFARD, *Stud. et Doc.* 1 (1935), 489-90. Notice of P. FOURNIER: by G. LE BRAS, *Stud. et Doc.* 1 (1935), 481-5. Notice of F. LL. GRIFFITH: by U. WILCKEN, *Archiv* 11 (1935), 318-19. Notices of A. HUNT: by H. I. BELL, *Proc. Brit. Acad.* 20 (1935), 16 pp. and *Aeg.* 14 (1934), 499-503; by P. JOUGURT, *Rev. de phil.* 8 (1934), 333-7; by L. WENGER, *Jahrb. der Bayerischen Akademie der Wissenschaften* 1934-5, 8 pp.; by U. WILCKEN, *Archiv* 11 (1935), 318-19; by F. DE ZULUETA, *Stud. et Doc.* 1 (1935), 486-8; by A. B. SCHWARZ, *Capitolium* (Istanbul) 1935 (Offprint). Notices of O. LENEL: by W. W. BUCKLAND, *LQR* 51 (1935), 265-7; by E. LEVY, *Rivista di diritto privato* 5 (1935), 69-74; by F. PRINGSHEIM, *Stud. et Doc.* 1 (1935), 466-80; by L. WENGER, *Jahrb. Bayer. Akad.* 1934-5, 10 pp. and *Z. Sav.* 55 (1935), vii-xi. Notice of D. P. PAPPULIAS: by P. G. VALLINDAS, *Mnemosyna Pappulia* (1934), 5-15. Notice of A. VON PREMERSTEIN: by W. ENSSLIN, *Z. Sav.* 55 (1935), 500-1. Notices of V. SCIALOJA: by P. DE FRANCISCI, *Arch. Giurid.* 29 (1935), 3-13; by S. RICCOBONO, *Bull. Ist. Dir. Rom.* 42 (1934), 1-22; *Notizie biografiche*, including bibliography, by L. T., *ibid.* 22-40. Notices of K. SETHE: by J. C(APART), *Chron. d'Ég.* 10 (1935), 77-8; by U. WILCKEN, *Archiv* 11 (1935), 318-19. Notices of G. VITELLI: by A. G. AMATUCCI, *Boll. fil. class.* 7 (1935), 73-6; by P. COLLART, *Bulletin Budé* 49 (1935), 59-66; by R. PREIFFER, *Gnomon* 11 (1935), 670-2. Notice of R. DE RUGGIERO by F. MAROI, *Arch. Giurid.* 113 (1935), 206-20.

(c) *Congresses.*

The remaining two volumes of the Bologna-Rome (April 1933) Congress of Roman Law, *Congr. Int. di d. R., Roma* Vol. II and *Bologna* Vol. II (both Pavia, 1935) have appeared; also the *Acta Congressus Iuridici Internationalis VII Saeculo a Decretalibus Gregorii IX et XIV a Codice Iustiniano Promulgatis, Romae, 12-17 Novembris, 1934*, in 5 vols. (Rome 1935), of which the first contains papers relating to the *C.J.*, the second those treating of the relation between Christianity and Roman Law, and the third, fourth, and fifth those concerned with Canon Law and the relations between Church and State. Short accounts of the 1934 Congress by P. COLLINET, *Rev. hist. dr.* 14 (1935), 86-9 and L. WENGER, *Z. Sav.* 55 (1935), 491-6. List of papers relating to Roman law, *Stud. et Doc.* 1 (1935), 245-8, of those in vols. 1 and 2 *ibid.*, 502-4. A. STEINWENTER, reviewing the papers read at the 3rd Papyrological Congress, 1933 (*JEA* 21, 91) in *Stud. et Doc.* 1 (1935), 444-6, says that no real papyrologist appears to be numbered among those scholars who assert a direct evolution of Roman law from classical times to Justinian and mistrust allegations of foreign influence. E. EGER, *Z. Sav.* 55 (1935), 368-72, indicates briefly the legal points in the volume, and adds a few words on *P. Varsov.*, no. 10, discussed in G. MANTEUFFEL's paper. Other reviews by W. SCHURAKT, *Gnomon* 11 (1935), 9-12; F. ZUCKER, *BZ* 35 (1935), 166; A. EHRHARDT, *OLZ* 38 (1935), 416-18. The 4th Papyrological Congress (Florence, April 1935) is briefly reported in *Rev. hist. dr.* 14 (1935), 391-3, by P. COLLINET, who gives a list of the legal papers; by A. CALDERINI, *Aeg.* 15 (1935), 342-4, and H. KORTENBEUTEL, *Gnomon* 11 (1935), 399-400. The proceedings are to be published in a special fascicule of *Aeg.* 16 (1936). Summaries of the papers read at the *Journées d'histoire du droit* (Louvain, April-May 1935) are given *Rev. hist. dr.* 14 (1935), 404-31, and a list of those appearing in *Mnemosyna Pappulia* (Athens, 1934) in *Stud. et Doc.* 1 (1935), Fasc. 2, 500. The *Actes du 4^e congr. int. des ét. byz., Sofia, Septembre 1934*, are published as *Bull. de l'Inst. archéologique bulgare* 9 (Sofia, 1935, 432 pp.).

(ii) Legal history of antiquity.

(a) *Cuneiform law.*

P. KOSCHAKER, *Keilschriftrecht*, *ZDMG* 89, N.F. 14 (1935) (offprint 30 pp.) reproduces with considerable additions two lectures delivered at Oxford in 1934. The article, written with K.'s customary clarity, may

serve as an introduction to the subject: 'Cuneiform' (no longer 'Babylonian-Assyrian') legal history is a single branch of study because, in spite of national divergences, Babylonian culture impressed a similar form on all those systems of law which have left their records in cuneiform characters. K. is critical of Wenger's 'Legal History of Antiquity'. While admitting that the new Oriental evidence may be treated as a means to a history of Greek and Roman law very different from the traditional product, he insists that the complex of legal systems revealed must also be studied for its own sake. In *Göttliches u. weltliches Recht nach den Urkunden aus Susa, Orientalia 4* (1935), 38-80, P. KOSCHAKER discusses some of the problems raised by the documents which V. SCHEIL made available in *Actes juridiques assyriens (Mémoires de la mission archéologique de Perse XXII, XXIII, XXIV)*, but those who hope from the title to find a clear parallel to the distinction between *fas* and *ius* will be disappointed. *Kibussūm* (or *Kubussūm*), indeed, is used with respect both to gods and to human rulers who 'tread out a path', i.e. lay down a law, whereas *kidinnum*, commonly rendered 'protection', is used only in relation to gods, and together the two words signify the whole of the law, divine and human, but loss of divine protection appears as penalty for breach of contract made under an oath sworn by the human ruler; gods appear regularly among the witnesses to contracts so sworn, and divine persons are concerned with all manner of purely temporal relationships. *Kibussūm* can refer to a single decree of a ruler, but it may refer to a code, and there is some evidence that the ruler for the time being was regarded as the author of the whole of the law in force. Parallelism between Babylonia and Elam is shown by the fact that in both countries the practice of swearing by the king gives way to that of swearing by the god; in both, too, the assertory, as opposed to the promissory oath, appears to be sworn exclusively by the god. The oath by the king, implying his divinity, was probably a Sumerian institution inconsistent with the religious ideas of the Semitic peoples who succeeded to power on the fall of the dynasty of Ur. Among Koschaker's chronological arguments the chief legal interest lies in the evidence brought forward for the succession of brothers in preference to sons in the ruling families at Susa (cf. *JEA* 20, 95). In *Rev. hist. dr.* 14 (1935), 423-5, K. treats of a different distinction in Babylonian law between *kettum* and *mišarum*. Both are divine, but the rigidity of the former needs correction according to the idea of government implied in the latter. Roman *aequitas* is not *mišarum*, for it lacks the social element, but Byzantine and Christian *aequitas* is more like it, and it may be that Christianity was influenced in this respect by ideas of the ancient East. L. OFFENHEIM, in *Studien zu den altbabylonischen Stadtrechten, Orientalia 4* (1935), 145-74, calls attention to unexpected coincidences in matter and form between documents from two North-Babylonian cities (Dilbat and Kish) and those from the southern cities of Larsa and Nippur. Both have affinities with Susa, which remain unexplained, but a later similarity between Elamite forms and those of the southern cities is probably to be attributed to the conquest and ends soon after Hammurabi's victories. A further unexplained example of 'Elamite' influence is to be found in the practice, beginning in Dilbat under the last ruler but one of Hammurabi's dynasty, of sealing with the nail. The *Assyrian Laws* by G. R. DRIVER and J. C. MILES (Oxford, 1935, 534 pp.) includes the 'Old Assyrian Laws', i.e. the three fragmentary tablets of which two are in the Louvre and one in Philadelphia (v. Z. *Sav.* 48 (1928), 529-82), and the 'Middle Assyrian Laws', i.e. the nine tablets discovered by the German excavators at Asshur, 1903-14. The longest of these (Tablet A) has been called by Koschaker a 'Rechtsspiegel für Frauen, speziell für Ehefrauen', but the editors take the view that the texts are not a 'mirror', but a series of legislative amendments to a body of laws which was either the Babylonian code itself or a body of laws closely related to it. Besides the transliteration and translation of the text the work contains a legal commentary, invaluable for comparative purposes, Philological and Critical Notes, and Sumerian and Assyrian glossaries. The third (*Urkunden in Form gewöhnlicher Protokolle*) and fourth (*Sachlich zusammenhängende Urkunden*) parts of G. EISSER's and J. LEWY's *Die altassyrischen Rechtsurkunden vom Kültepe* have appeared (*Mitteil. d. vorderasiat.-aeg. Ges.* 33, Teil 3-4 (1935), 220 pp.). There are indexes to the four parts, but the *juristische Erläuterung* is still to come. M. DAVID, *Tijdschrift* 14 (1935), 1-8, discusses some of the legal points raised by Böhl's recent publications of documents in the Leiden collection (*Mededeelingen uit de Leidsche Verzameling van Spijkerschrift-Inscripties*, 1 and 2, and *Ex Oriente Lux*, no. 2, 50 ff.—not seen). The economic texts are said to confirm the view that private ownership of land was unknown in the early Sumerian period, i.e. until about 2300. There are discussions of *tirhatum* (not *pretium virginitatis*, but provision for widowhood or divorce) and of *superficies solo cedit*, with references to Ptolemaic law (cf. below, c). A. UNGNAD, *Archiv Orientalní* 7 (1935), 8, gives short summaries (with facsimiles) of five contracts of the Third Dynasty of Ur acquired by the University of Jena before 1914. M. SAN NICOLÒ, *ibid.*, 16-28, continues his *Parerga Babylonica* (*JEA* 21, 91, etc.). No. 15 treats of two contracts, each belonging to a type rare in the late Babylonian period. The first, Pohl. 1, 14, of 573-572 B.C., is a 'true' adoption of an illegitimate infant by his mother's brother. The child is to count as junior to his

uncle's existing son, and both children are to serve 'the Lady (i.e. Ištar) of Uruk and the King'. SAN N. thinks that this provision probably explains the further clause whereby the adopter swears not to give the child to his (the adopter's) brother or sister. The adopter has limited his parental power by dedicating the child to religious service, and the *palāḫū* relationship (analogous in many ways to *παράνομή*) must not be disturbed by his entering into a similar relationship even with his nearest relations if they should claim it on family grounds. The second contract, BE. VIII, 47, of 551-550 B.C., is a hiring of a wet-nurse from her father, the first Babylonian independent document of this sort to become known. SAN N. notes that he has given up his former opinion that in old Babylonian law the nursing contracts were always intended to create a 'false' adoption and must be clearly distinguished from contracts of hire. No. 16 treats further of temple prebends (cf. *JEA* 20, 95). It now appears that even after proposed new holders had been found fit by the temple assembly, a final appointment by the director of the temple (as by the *ἀρχιερεὺς* in the Egyptian parallels) was necessary, and was notified to the royal commissary as head of the royal exchequer in the temple. No. 17 (*ibid.* 367-71) points out the importance of the numerous documents concerning the administration of the temple of Eanna for the late Babylonian period, and, by way of example, discusses YBT VII, 186, of 524-523 B.C., which has reference to a temple milling monopoly. Articles by the same author on *Diebstahl*, *Dienstvertrag*, and *Draufgeld* appear in the *Reallexikon der Assyriologie*. He also reviews two collections of Arabic papyri by A. GROHMANN, *Z. Sav.* 55 (1935), 459-64 (*Arabische Papyri aus den staatlichen Museen zu Berlin. Band I, Teil I: Protokolle u. Rechtsurkunden* (1934); and *Arabic Papyri in the Egyptian Library I: Protocols and Legal Texts*, Cairo, 1935—not seen).

(b) *Egyptian law.*

E. SEIDL, *KVGR* 27 (1935), 268-77, continues his *Sammelbericht* of translations and treatises concerning pre-Ptolemaic law for the years 1930-4. The chief work recorded is J. PIRENNE's *Hist. des institutions et du droit privé de l'ancienne Égypte*, vols. 1 and 2 (*JEA* 21, 92). While fully recognizing the great value of the work, S. notes that since the second volume appeared nearly all the documents in it have been republished by K. SETHE in the new edition of his *Urkunden des alten Reichs*, I (1933), so that PIRENNE's translation⁸ must now be compared with SETHE's new publication of the texts. SEIDL also reviews the book in *Z. Sav.* 55 (1935), 345-52, where he disagrees with P.'s view that the conception of a legal person is implied as early as the Third Dynasty by reason of the treatment of funds devoted to the cult of the dead, and expresses the wish that P. had gone into the question of the importance of the Nile in giving rise to a state embracing the whole country and to absolutism. E. STEIN, *Rev. de phil.* 10 (1936), 43-55, while expressing his great admiration for an epoch-making work, points out that the nature of the authorities has forced P. to rely in large measure for his reconstruction of the history of institutions on the titles of officials, and makes some criticisms based on the difficulties which similar methods encounter in solving Roman and Byzantine problems. J. PIRENNE himself, *Rev. hist. dr.* 14 (1935), 419-21 (*Journées d'hist. du dr.*), gives a short account of judicial administration under the Fourth and Fifth Dynasties, in which he refers also to his third volume as in the press. It has since appeared as *La VI^e Dynastie et le démembrement de l'Empire* (2 fascicules, together 653 pp., Brussels, 1935). J. CAPART, *Chron. d'Ég.* 10 (1935), 215-23, gives a translation, with some explanatory remarks, of the Amherst Papyrus concerning tomb-robberies under the Twentieth Dynasty, completed by that of the Pap. Leopold II, now found to contain the beginning and other missing parts of the document. The beginning gives us the personnel of the great council which heard the result of the inquiry into the robberies. A short account of the new papyrus and the circumstances in which it came into his hands is also given by J. CAPART in *C.-R. Ac. Inscr. et B.-L.* (1935), 121-7. C. PRÉAUX reviews Sir H. Thompson's *A Family Archive from Siut* (*JEA* 21, 92) very favourably in *Chron. d'Ég.* 10 (1935), 162-6; an unsigned review also appears *ibid.* 65-6.

(c) *Greek law.*

G. A. PETROPOULOS, *Πνεῦμα καὶ ἐξέλιξις τοῦ ἀρχαίου ἑλληνικοῦ δικαίου* (Offprint from *Ἀρχαίων Ἰδιωτικοῦ Δικαίου* 2 (1935), 33 pp.), does not touch papyrology, but gives a short, well-documented account, ending in a defence of Greek law against Cicero's unflattering comparison with Roman. J. H. OLIVER, *Hesperia* 4 (1935), no. 1, 1-32, discusses again the question of the *κύρβεις* and *ἄφορες* and the republication of Solon's laws by Nicomachus, *à propos* of a marble block discovered in the Agora during the course of excavations by the American School of Classical Studies in April 1933. The block contains on the obverse a fragment of a law, probably dating from the end of the fifth century, defining where the responsibility lay for the maintenance of triremes, and giving some details of the legal procedure involved in case of dispute. On the

reverse is a fragment of a sacred calendar, part of the re-edition of Solon's laws. For ἀγογές and κρύβειν cf. also M. GUARDUCCI, *Bendic. Pont. Acc.* 7, 367 ff. (not seen), quoted by M. N. TOD, *JHS* 55 (1935), 206. W. HELLEBRAND, *KVGR* 27 (1935), 335-64, reviews favourably U. E. PAOLI's *Studi sul processo attico* (*JEA* 21, 92). He is particularly interested in the implications of the questions raised for modern political theory.

I have not seen U. E. PAOLI, *L'autonomia del diritto commerciale marittimo nella Grecia classica* (offprint from *Atti pro Tabula d'Amalphi* 1), Naples, 1934, 22 pp.

(d) *Roman law. Oriental, Hellenistic, and Christian Influence.*

Two works, S. RICCOBONO, *Corso di dir. rom., Parte 2*, and E. ALBERTARIO, *Introd. stor. allo studio del dir. rom. giustiniano, Parte 1*, were mentioned last year as having the oriental character of late R.L. as their main preoccupation. A new volume of the former, *Stipulationes, contractus, pacta* (unnumbered, Milan, 1935, 485 pp.) has appeared, and the fourth chapter of the latter has also been reprinted, *Stud. et Doc.* 1 (1935), 9-47, under the title, *I fattori della evoluzione del dir. rom. postclassico e la formazione del dir. rom. giustiniano*. G. DONATUTI, *Arch. Giurid.* 114 (1935), 238-41, while reviewing Albertario favourably, thinks he sometimes assumes Christian influence where Stoicism is more probable. V. ARANGO-RUIZ, reviewing E. ALBERTARIO's *Studi di dir. rom.* 1 (*JEA* 20, 94-5) in *Arch. Giurid.* 113 (1935), 71-81, is closer to A.'s position than Riccobono's, but thinks A.'s theories would be more convincing if the black and white were not always so sharply contrasted. Other favourable reviews by F. PRINGSHEIM, *Gnomon* 10 (1934), 274-7, and L. WENGER, *KVGR* 27 (1935), 278-86. I have not seen *Cristianesimo e dir. rom.* by M. ROBERTI, E. BUSSI, and G. VISMARA (Milan, 1935), vii+406 pp.), but M. ROBERTI, *Le collezioni giustiniane e il Cristianesimo*, *Congr. Int. di d. r. Roma* II (1935), 131-4, gives a summary of his introduction, insisting upon the importance of studying patristic literature and of distinguishing different aspects of the problem. It appears from E. SEIDL's review, *BZ* (1935), 144-5, that ROBERTI contributes essays on 'Nasciturus pro iam nato habetur' nelle fonti cristiane primitive, and *L'influenza cristiana nello svolgimento storico dei patti nudi*; BUSSI one on *La donazione nel suo svolgimento storico*, and VISMARA one on *La donazione nuziale del d. ebraico e nelle fonti cristiane in relazione al d. r. postclassico*. S. RICCOBONO, *L'influsso del Cristianesimo sul dir. rom.*, *Congr. Int. di d. r. Roma* II (1935), 61-78, emphasizes the effect of Christian ethics in post-classical times, to which the materialist interpretation of history blinded the nineteenth century. Even to-day infatuation for Byzantine and oriental influence, fed by the flow of papyri, has led to the treatment of Latin texts as secondary, and the *Corpus Iuris* is explained by reference to these Graeco-Egyptian documents. On the other hand, A. BECK, *Christentum u. nachklassische Rechtsentwicklung*, *ibid.*, 91-122, uses patristic literature to show that, apart from a few matters, the influence of Christian conceptions on the private law of the West was negligible, and G. BAVIERA, *La codificazione giustiniana e il Cristianesimo*, *ibid.*, 125-8 (summary), holds that, though some provisions have the definite purpose of introducing rules of the Christian religion, Christian ethics, being other-worldly, had not transformed society and could not therefore affect private law at all deeply. Most of what is alleged to be Christian is Stoic. H. S. ALIVISATOS, *Les rapports de la législation ecclésiastique de Justinien avec les canons de l'Église*, *ibid.*, 81-7, asserts that Caesaropapism, though allowing no organization within the State to exercise power except through State authorization, did not prevent Justinian, deeply imbued as he was with religious faith, from solving the question of the relations between Church and State in an ideal manner. F. KOZMAN, *Les Chrétiens d'Égypte ont-ils adopté et suivent-ils jusqu'à nos jours la législation Justinienne ou uniquement le Code Théodosien connu sous le nom de coutumier Syro-Romain?*, *Congr. Jurid. Internat.* II (1935), 173-224, takes the view that native Egyptian law survived through the Ptolemaic and early Roman periods, that it formed the chief element in the orientalization of Roman law which began with Constantine and was finally achieved by Justinian, and that J.'s legislation, being thus suited to the national character, has remained in force until the present day. The Syro-Roman law-book is a vulgarization of the customary part of the *C.Th.* Its use by Coptic canonists cannot be denied, but they reject it when it conflicts with J. That it received any authority at all is to be explained mainly by its Syrian origin and the close connexion between the Syrian and Egyptian Monophysites as exemplified by the career of Severus. L. WENGER, *Römisches oder orientalisches Rechtsgut in C. I Cod. Just.* 7. 7., *ibid.*, 1, 203-34, sees a connexion between the power of manumission vested in one *consors* according to the new Gaius and Justinian's enactment that manumission by one co-owner should be effective, subject to compensation of the others. The classical rule that the manumitter lost his share to the others (*Ulp. Reg.* 1. 18. *Paul Sent.* 4. 12. 1) cannot have been uncontradicted. The *ambiguitas* mentioned by Justinian does not refer so certainly to fidei-commissary manumission only as Mitteis thought, and the papyri concerning partial manumission show that

even here full freedom was the object in view. Partial manumission is found in Oriental systems (Rotondi, *Scr. Giur.* 3, 60-77), but there is nothing in *C.J.* 7. 7. 1. parallel to the Jewish manumission by a single owner *pro parte*, or to the Jewish objection to a status intermediate between freedom and slavery on the ground of resulting impossibility of marriage. The source of Justinian's reform is thus to be found not in the East, but in Roman tradition, still known in the Eastern Empire in or shortly before Justinian's time from the text of Gaius as it appears in PSI 1182. (For this dating cf. below, A iii.) *Consortium* may have been omitted from the Veronese precisely because it would have supplied an argument against the view of partial manumission accepted in the West. F. PRINGSHEIM, *Natura contractus und natura actionis*, *Stud. et Doc.* 1 (1935), 73-82, argues that these phrases, which do not occur in pre-Justinianean constitutions or in Western sources, can only come from the Eastern schools. G. LA PIRA, *La genesi del sistema nella giurisprudenza romana, Problemi generali, Studi in onore di F. Virgili* (Siena, 1935, not seen); *L'arte sistematrice*, *Bull. Ist. Dir. Rom.* 42 (1934), 336-55; *Il Metodo, Studia et Documenta* 1 (1935), 319-48, discusses the effect of Greek scientific methods, in particular those of dialectic, in laying the foundations on which Roman jurisprudence was built. E. CARUSI, *Sui rapporti tra il diritto romano e l'Oriente*, *Congr. Int. di d. r., Roma* II (1935), 557-605, is a plea for the co-ordination of studies of all the legal systems of the Eastern Mediterranean on the ground of constant interaction. Comparison is not enough. Two periods should be distinguished. In the earlier, Roman law is the recipient, and is influenced mainly by Syrian and Hebrew law, in a minor degree by the systems of Egypt and Greece. In the later, in its turn it has a profound effect on the Muḥammadan, as well as, in a lesser degree, on the Armenian and 'Copto-Ethiopian' systems. C. A. NALLINO's views on the Syro-Roman law-book (*Studi Bonfante* 1 (1930), 203-61) are strenuously opposed. The law is certainly not Roman, and even if the translation into Syriac is assumed to be as late as the eighth century, NALLINO's hypothesis of didactic origin, disappearance, and rediscovery is unsupported conjecture.

(e) *Coptic law.*

A. STEINWENTER, *Zur Edition der koptischen Rechtsurkunden aus Djéme*, *Orientalia* 4 (1935), 377-85, describes the methods which he and G. STEINDORFF propose to adopt in their vol. II of W. E. CRUM and G. STEINDORFF's *Koptische Rechtsurkunden des 8ten Jahrh. aus Djéme (Theben)*, and, by way of example, gives a translation, with introduction and notes, of KRU 105. F. ZUCKER, *BZ* 35 (1935), 176, has a note on STEINWENTER's *Bedeutung der Papyrologie für d. kopt. Urkundenlehre* (*Pap. u. Altertumswissenschaft*, 1934, 302-13). K. F. W. SCHMIDT, *GGA* 197 (1935), 409-26, gives varying readings and his own translation of parts of each of A. A. SCHILLER's *Ten Coptic Legal Texts* (*JEA* 20, 96). See also above, A ii d, and below, A vi and C.

(iii) *Juristic texts and comments.*

In his Preface to *Urkunden der Ptolemäerzeit, II. Band (Papyri aus Oberägypten) 1. Lieferung* (1935), U. WILCKEN announces that the volume when complete will contain, in addition to the few third-century documents, those of the second century (with a few of the first) divided into two main groups: (i) documents of the Choachytai, of the Pastophoroi of Amenophis, drafts (*Anweisungen*), receipts, etc., of the royal bank of Thebes (including some not yet published), followed by (ii) 'Miscellanea' and a word-list covering both volumes. The present *Lieferung* includes the third-century documents (nos. 151-9), mostly of legal importance, and the first Choachytai documents (nos. 160-2), i.e. the chief 'Hermias' texts, Tor. 2, Par. 15, and Tor. 1). These last are prefaced by a general explanation of the Hermias case and a short appreciation of the legal points involved. W. accepts E. SCHÖNBAUER's view (*Liegenschaftsrecht*, 33 ff.; cf. *Z. Sav.* 50 (1930), 694) that Hermias is not bringing a *vindicatio*, but claiming a sort of interdictal protection against forcible dispossession. This is shown (a) by the form of the claims and decisions, (b) by the fact that he never approaches the ordinary courts but only officials with the duty of keeping the peace, whose decisions do not have the force of *res iudicata* and cannot be pronounced by default. The reason for Hermias' conduct appears from what opposing counsel says in no. 162 VII 3 ff., i.e. that before the *χηματιστάι* he would not even have been heard unless he produced documentary evidence which he evidently had not got. The wording of no. 162 VI 6-7 (*τὴν ἀντιδικίαν*) shows that the *χηματιστάι* would have been the proper tribunal, and (p. 81) the failure of the defendants to vouch their predecessors in title to warranty is also due to the fact that such a proceeding would only have been possible in an 'ordinary' court. The difficulty that the plaintiff, as well as the defendants, appears to rely on the *προστάγματα περὶ προβεσμίων*, although the provisions quoted obviously favour the defendants, W. explains (p. 83), following Peyron, by supposing that the plaintiff must have had a different part of these rules of prescription in mind. P.'s translation of no. 162 IV 30 ff. is, how-

ever, impossible, and W. deduces from the absence of sense in the passage that it conceals a lacuna in which the provisions favouring the plaintiff were quoted. Another new point of importance is the deduction drawn from no. 162 VII. 9, *κατὰ τοὺς πολιτικοὺς νόμους καὶ τὰ ψηφίσματα* that the *χρηματισταὶ* might base their judgments on the law of the autonomous Greek cities. There is a short appreciative review by H. KORTENBEUTEL, *Gnomon* 12 (1936), 58-9. J. C. NABER, *Aeg.* 14 (1934), 452-62, *Ad papyros quosdam Cairo-Zenonianos IV (ult.)*, continues his criticisms, treating of nos. 59564, 59620, 59621, 59624, 59633, 59637, 59638, 59639, 59640, 59641, 59643, 59647, 59656. In *Aeg.* 15 (1935), 207-27, under the auspices of M. Norsa, several students of Florence and Pisa publish ten *Papiri della Società Italiana*, the following being of legal interest: no. 1 (J. S. DONADONI), a guarantee on behalf of a woman of A.D. 212; no. 2 (G. POGGI), a petition apparently asking for the removal of the petitioner's name from a list of persons subject to a higher rate of taxation, A.D. 222; no. 3 (G. A. GERHARD), a request for the inclusion of two boys in the list of *dodecadrachmoi* (third century); no. 4 (G. A. GERHARD), a lease of land belonging to the city of Oxyrhynchus (third century); no. 9 (S. CAMMELLI), a sale of the third part of a house, of A.D. 430. A. CALDERINI, *ibid.*, 246-8, publishes a contract of *mutuum* of the late first or early second century from the unpublished papyri of the Milanese collection. E. VISSER, *ibid.*, 267-76, publishes with a short commentary six letters and documents from the Berlin collection. Only one, P. 16046 B, is of serious legal interest. It is a *δολογία* of sale dated about A.D. 300. In line 5 we find *ἐκτός [ἐ]ραῖς νόσου καὶ ἐπαφῆς [καὶ] ἀνεπιλημπτὸν ἀπὸ δαίμονος*. If, as W. SCHUBART suggests, we take the last two items as parallels, the meaning may be 'free from liability to seizure by man or demon', and we have an argument for the 'legal' interpretation of *ἐπαφή*. The editor herself has doubts, and for obviously good reasons. O. MONTEVECCHI, *ibid.*, 303-4, proposes to get rid of some difficulties in P. Oxy. XVII, 2134 by taking *ἀφῆλικος* as the genitive of a proper name, which has now been found in some of the Michigan ostraca. O. MONTEVECCHI, *ibid.*, 341-2, *Rapporti tra PSI VIII 901-918 e P. Mich.* II, shows that the entries of a *δολογία φερνῆς* and a *συγγραφή τροφίτης* in P. Mich. II, 121 verso, XII, 3 and 4, must refer to the marriage contract mentioned in PSI 904, and that the entry of a *δολογία προσφορᾶς* in P. Mich. II, 124 verso, I, 5 in all probability refers to the receipt of an addition to the dowry in PSI 904 itself. Other identifications are also possible. A. E. R. BOAK, *ibid.*, 265-6, publishes P. Mich. Inv. 6629, *A petition addressed to Apollonius, strategos of Heptakomia*. The petitioner asks that his opponent should be summoned by an official to appear at the approaching assize of the prefect, Haterius Nepos, and states the nature of his claim, a debt of 66 drachmae. The date, according to B.'s reasoning, cannot be earlier than 120. P. Lond. Inv. 2554, published with translation and commentary by C. H. ROBERTS (*Two Papyri from Oxyrhynchus*, *JEA* 20 (1934), 20-8) is a request dated A.D. 249 and addressed to two *βιβλιοφύλακες* for the cancellation of a *κατοχή τῶν ἀνομιμάτων* on repayment by the petitioners of the loan which it secured. No similar document has been published previously. The legal nature of the *κατοχή* remains obscure, but Mitteis's view that it refers to entry on a list of *debitores fisci* is now seen to be too narrow. C. H. ROBERTS, *JEA* 21 (1935), 52-6, publishes *Two letters of the Byzantine period*. The second, P. Berol. Inv. 2753, ll. 9-12, has reference to a guarantee which the writer was forced to give on behalf of the addressee to one of the *numerarii* before he was allowed to leave Memphis. Z. DE PAZMANY, *P. Lond.* 2565 (Pécs. 1935), 9 pp., contains legal proceedings held before Sabinus, Prefect of Egypt, circa A.D. 250. A discussion on nomination to one liturgy or more forms its subject (not seen). C. PRÉAUX, *Chron. d'Ég.* 10 (1935), 396-8, reviews N. HOHLWEIN's *Papyrus grecs inédits du Caire* (*Mé. Maspero* 2 (1934), 17-31). Three of the five documents are of legal interest: no. 1, a letter from the prefect to a strategus; no. 2, a receipt; and no. 4, a fragment of a *παράγγελμα*. She also gives a short account, *ibid.*, 399, of the very curious *Prêt de grains* of A.D. 497, published by G. ROUILLARD, *Mé. Maspero* 2 (1934), 177-184. M. SAN NICOLÒ, *OLZ* 38 (1935), 670-1, reviews UXKULL-GYLLENBAND's commentary on the *Gnomon* (*JEA* 21, 93) with some severe strictures from the technical Roman law point of view. M. ROSTOVITZEV, *Gnomon* 11 (1935), 522-8, is more favourable, though he regrets the absence of a full bibliography and that the author has contented himself with giving his own views on earlier research without stating the results of that research. A few comments on particular points are added. In particular R. refuses to accept any translation so far suggested for the words in the proemium *ἐν μέσῳ κεφάλαια*. These words contain no material description of the contents but are an expression borrowed from rhetoric meaning simply 'Die vorliegenden Kapitel', i.e. 'the chapters handed over herewith'. It is also stated that C. B. WELLES has confirmed PAPPIAS' reading *τούτων ἢ* for *τοῦ νόμου* in P. Dura 5 (*JEA* 18, 98; 21, 93) by reference to the original. P. COLLART, *Rev. é. fr.* 48 (1935), 591-2 praises U.-G.'s 'patient and clear erudition'. O. MONTEVECCHI, *Aeg.* 15 (1935), is also favourable. The new fragments of Gaius: the seventh edition of the Teubner text, edited by B. KÜBLER (1935), includes the new knowledge, and F. DE ZULUETA has published the paragraphs recovered from PSI 1182 and P. Oxy. XVII, 2103, together with a translation and short notes, as

Supplements to the Institutes of Gaius (Oxford, 1935, 12 pp.). V. ARANGIO-RUIZ, *Il nuovo Gaio. Discussioni e Revisioni*, *Bull. Ist. Dir. Rom.* 42 (1934), 571-624, gives an amended text of PSI 1182 with textual notes, followed by discussion of the points raised by other scholars. J. C. VAN OVEN, *Tijdschrift* 13 (1934), 248-53, gives the text and a brief account of the fragments. L. WENGER, reviewing E. ALBERTARIO, *Studi di dir. rom. I*, in *KVGR* 27 (1935), 278-86, says at p. 281 that PSI 1182 cannot, according to P. LEHMANN and R. v. HECKEL, be safely dated before the sixth century, and refers to a forthcoming article by himself and STROUX to be published in *Sitzungsber. Bayer. Akad. Wiss.* H. KRELLER, *Z. Sav.* 55 (1935), 159-82, in a moderate article *Zur Frage der Zuverlässigkeit unserer Gaiusüberlieferung*, shows on the one hand that the work which we know as the Institutes of Gaius dates from the classical period (though it is not a literary 'classic'), but on the other hand that, like the Digest, though in a lesser degree, it needs detailed investigation to clear it of glosses and interpolations. He applies the methods which he advocates to two passages, the first seven paragraphs of Bk. 1, where he comes to the conclusion that almost the whole text is genuine, and Bk. 4, 48, where he gets rid of a long-standing difficulty by regarding *argumentum . . . solebat* as a gloss. I have not seen V. ARANGIO-RUIZ, *Les nouveaux fragments des Institutes de Gaius*, *Al Qānūn wal Iqtisād* 4 (1934), 65 ff. A. KOKOUREK, *Congr. Internat. di dir. rom. Roma II* (1935), 497-526, argues that Gaius was probably an imperial slave of Syrian, Jewish, or Egyptian origin, and that he held an important post in Hadrian's secretariat. See also D (vii) below.

(iv) Diplomatic.

S. AVOGADRO, *Le ἀπογραφὰὶ διὰ τῆς ἐξουσίας ἐν τῇ ἐκκλησίᾳ τοῦ αἰῶνος, Aeg.* 15 (1935), 131-206, studies both the returns of tax-payers and those made to the βιβλιοθήκη ἐκκλησιαστικῆς, accepting Harmon's results (*JEJ* 21, 93) concerning form and contents of the latter, and the view that owners were in fact left free to notify their acquisitions when they pleased. We note the clearing up of the position of the ξένος, mentioned in connexion with the verification of returns of animals (145); the refusal to accept Seidl's view that the exaction of an oath in returns of animals was left to the discretion of the revenue officials (173), and the argument that ἀπογραφὰὶ of ἀβροχία had to be in by the beginning of Pharmouthi when the ἐπίσκεψις took place (186-9). Pp. 192-206 treat of the social and economic data to be derived from ἀπογραφὰὶ. Table of documents, pp. 132-7. An appreciative review of HARMON's study with a summary of his main conclusions is given by C. PRÉAUX, *Chron. d'Ég.* 10 (1935), 393-6. PSI 1183, apart from the new Gaius the only Latin text in vol. XI (1935) (published previously in *Mélanges Maspero* 2 (1934)), consists of two incomplete copies of the same document, in which a person whose name is lost states that he and his children were given Roman citizenship by Claudius in A.D. 45, and also that he owns certain immovable property in Oxyrhynchus jointly with other persons, as well as, apparently, movables. It may be an ἀπογραφὴ, but if so it is the only Latin one known, and the editors suggest that it may be something quite different, e.g. a document concerning an inheritance. In *Studi bizantini e neoellenici* (1935), 251-67, *Registro Vaticano di atti bizantini di diritto privato*, G. FERRARI DALLE SPADE gives the text of a Vatican MS. dating from the first half of the sixteenth century together with a legal commentary. Nineteen documents—sales, marriage contracts, contracts of apprenticeship, and one maritime loan—are included, all certainly coming from Constantinople and dated between 1363 and 1372. The editor gives good grounds for his belief that the collection is one of notarial enrolments, some of the documents being quite short statements of the gist of the transaction, which may or may not have been followed by a fuller contract. In the first document also there follow after the statement of the purchase the words 'ἵστέον γὰρ μὴν ὅτι τὰ ῥηθέντα οὐκ εἰσὶν ἐπὶ τῷ ἐπισημένῳ Δημητρίῳ ὡς περ τιγγάνων αὐτῷ ἰδικόν. ὅσπερ οὖν τοῖον ἐξετάσαντες εὐρομεν ὡς οὐκ αὐτῷ ἀλλὰ γράφει τινος, which in the editor's opinion point to a quasi-judicial activity of the *tabularius* who drew up the document. If his general conclusion is right the collection is, he says, the first known example of a Byzantine counterpart to a class of legal documents well known in the West in the Middle Ages. F. DÖLGER, *BZ* 35 (1935), 175, in his notice refers, among other points, to a scholion (*Προσάρτημα*, HEIMBACH, *Basílica II*, 482) which mentions an enactment of Alexios Comnenos allowing such documents to be used as evidence if the originals were lost. I have not seen M. PUMA, *La conservazione dei documenti giuridici nell'antica Roma*, Palermo, 1934, vi+93 pp., or GULAK, *Das Urkundenwesen im Talmud im Lichte der gr.-aeg. Papyri u. des gr.-röm. Rechts*, Jerusalem, 1935, iv+162 pp.

(v) Personifications of law.

M. Norsa and G. VITELLI, *Da Papiri della Società Italiana, Annali della R. Scuola Normale super. di Pisa* 4 (1935), 1-16: the second of the four fragments published, pp. 3-14, consists of fragments of poems of Euphronion, col. I and col. II to l. 26, being attributed to that author's Θράξ. Both Θράξ and Δίκη are personi-

fied and characterized. Varying restorations by P. MAAS, *Gnomon* 11 (1935), 102-4, and E. LOBEL, *Riv. di fil.* 13 (1935), 67-8, who would read *Δίχην ἢ τ' ὅσα πυχρὸν ἔχον ἀείρει* for the editors' *τε γρήιον*. K. LATTE, *Philologus* 90 (1935), 129-55, explains *Θέμιν τιμωρὸν ἔδων* by reference to *καλῶν ἐπιτάρροθος ἔργων* as *Helferin des Guten*, and notes that the usual list of sins, offences against the gods, parents, and guests is here extended by the addition of 'wresting the laws'. The text is also discussed by F. PRISTER, *Phil. Woch.* 55 (1935), 1357-60.

(vi) The oath.

E. SEIDL, *Der Eid im römisch-ägypt. Provinzialrecht, II: Die Zeit vom Beginn der Regierung Diokletians bis zur Eroberung Ägyptens durch die Araber*, *Münch. Beitr.*, no. 24, 1935, holds that the peculiarities of the Egyptian law of oaths in the Dominate were no longer due to a provincial policy different from that of the rest of the Empire, but to a rebirth of native ideas in spite of the theoretical unity of law which Diocletian had been most successful in embodying in practice. S. finds new evidence for his view that the form of oath was officially prescribed during the Principate in P. Dura 73, and holds that this practice continued until about the reign of Arcadius and Honorius. The influence of Christianity was slow in making itself felt. The oath by the Emperor's *τύχη*, in spite of its original heathen meaning, was acceptable as merely a polite manner of referring to him, and is found as late as Heraclius. Egypt may have been behind the rest of the Empire. The first purely Christian oath is in PSI 689 (Honorius and Theodosius II), where the mention of God precedes that of the Emperor, although *C. Th.* 2. 9. 3. of 395 already assumes the use of an oath invoking the divine name. Though the papyri provide no certain case of Christians taking an oath before the middle of the fourth century, there is abundant evidence thereafter, and the prohibition of clerical oaths was evaded in one way or another—even directly contravened after 521. Under the heading 'use of the oath in public law', S. emphasizes the differences between the periods before and after the introduction of *αὐτοπαιγία*. He then passes to the use of the oath in procedure. Here one may note particularly the prominence of exculpatory oaths, which may be due to a survival of native conceptions, but may also point to a more extensive use in the imperial law than would appear from Justinian, and the idea which S. definitely regards as native, that an oath may be owed by one party to another, who can give a receipt after it has been taken. Sections on the oath in private transactions, the sanctions of the oath, and an appendix on the oath in Coptic law and the Greek documents of the Arab period complete the book. Part I (*JEA* 20, 98; 21, 94) is reviewed appreciatively by B. KÜBLER, *KVGR* 27 (1935), 375-82, though with some criticism, and by P. COLLART, *Rev. ét. gr.* 48 (1935), 337-8. H. VOLKMANN, *Rechtssprechung* (below, F) 168, takes SEIDL to task for dating the introduction of the *τύχη* oath as late as Domitian, in spite of Josephus, *Ant. Jud.* 16, 344 which attests its existence under Augustus. S. replies, *Stud. et Doc.* 1 (1935), 453, that the oath there mentioned has no connexion with the official introduction of the form into Egypt, and that the use of such oaths outside Egypt before Domitian has long been known.

(vii) *Ἐλάττωμα*.

L. SCHNORR VON CAROLSFELD, *Z. Sav.* 55 (1935), 288-91, gives reasons for believing that *ἐλάττωμα* does not mean curtailment (*Verkürzung*), but like the words with which it is commonly associated (e.g. *δίκη . . . κακοῦτος καὶ κακοῦθελος καὶ ἐλαττώματος* in P. Mon. 9, ll. 12 ff.) refers to a mental state, 'ill-will'.

B. LAW OF PERSONS

(i) Juristic persons.

Further reviews of L. SCHNORR V. CAROLSFELD's *Gesch. der jurist. Person* (*JEA* 21, 94) by M. RADIN, *Cl. Phil.* 30 (1935), 174-5, who is laudatory on the whole, and by H. LÉVY-BRUHL, *Rev. de phil.* 9 (1935), 402-3, who is also favourable.

(ii) Registration.

H. J. SCHELTEMA, *Professio liberorum natorum*, *Tijdschrift* 14 (1935), 86-93. The statement of Capitolinus (*Vita Marci* 9) that M. Aurelius first ordered registration of the children of citizens before the *praefecti aerarii Saturni* at Rome and before the *tabularii* in the provinces is a puzzle, for papyri and literary allusions show that the institution existed long before Marcus' reign. The chief point was probably that a person who could produce a *testatio* of such registration was to be assigned the role of defendant in the proceedings preparatory to a *liberalis causa* mentioned in D 40. 12. 7. 5. See also E. WEISS, *Zur Entstehungsgeschichte des kirchlichen Matrikelwesens*, *Congr. Iurid. Internat.* 1 (1935), 237-41, where the Greek, Graeco-Egyptian, and Roman registers are briefly described.

(iii) Slavery.

W. L. WESTERMANN's article *Sklaverei* in *PW, Supplementband 6* (1935), 894-1068, uses much papyrological material.

(iv) Marriage.

G. EISSER, *Z. Sav.* 55 (1935), 361-3, reviews L. WAHRMUND's (posthumous) *Das Institut der Ehe im Altertum* (Weimar, 1933). The book deals with the 'Urzeit', the Babylonian together with other ancient systems of the near East and Egypt, but was, it seems, already out of date at the time of publication. It is said to be useful only as a not always complete collection of materials. W. ERDMAN, *Die Ehe im alten Griechenland, Münch. Beitr.*, no. 20 (1934), gives an amply documented and clear, perhaps even over-simplified, account of Greek marriage in pre-Hellenistic times. On *ἐγγύησις* he follows Hruza, regarding it as the marriage itself, not a mere betrothal; it is in fact an undertaking by the bride's *κύριος* of which the *ἐκδοσις* is the fulfilment, but the lay mind here, as with sale, fails to make the distinction between the contract and its fulfilment. B. KÜBLER, *Phil. Woch.* 55 (1935), 1371-83, while praising the book highly, disagrees on a number of points. The Athenian woman was not so severely cut off from society as E. imagines, nor was she without rights of succession; affinity in the direct line was an impediment to marriage at least according to unwritten law; that according to Andocides, *De Myst.* § 128, Kallias has married his mother-in-law is no argument to the contrary, for it was an unheard-of scandal. On *ἐγγύησις* E.'s view is self-contradictory, for he accepts Hruza's view that it was equivalent to *sponsalia de praesenti* and yet speaks of the *ἐκδοσις* as the fulfilment of the *ἐγγύησις*. K.'s own view is that *ἐγγύησις* is rather *sponsalia de futuro*. H. KRELLER, reviewing favourably, *Z. Sav.* 55 (1935), 363-5, criticizes E.'s use of the Roman distinction between contract and conveyance, and (*ibid.*, p. 480) seems to prefer the view expressed by F. BOZZA, *Il matrimonio nel diritto attico* (*JEA* 21, 95), that *ἐγγύησις* is a guarantee by the bridegroom of the legitimacy of the intended marriage. O. MONTEVECCHI, *Aeg.* 15 (1935), 337-9, reviews ERDMAN favourably in the main, but points out that he does not quote Paoli, who is among those who make a clear distinction between *ἐγγύησις* and *ἐκδοσις*. Reviewing G. PETROPOULOS, *Τὰ περὶ γάμου ἐν Αἰγύπτῳ κατὰ τοὺς Ἑλληνο-αἰγυπτιακοὺς παπύρους* (1931), and W. F. EDGERTON, *Notes on Egyptian Marriage chiefly in the Ptolemaic Period* (1931), *ibid.*, 339-40, while admitting the possible truth of PETROPOULOS's view (*JEA* 18, 96) that the fusion of Greek and Egyptian elements accounts for *γάμος ἐγγραφός* and *ἀγγραφός* in Roman times, she points to the difficulties which his theory encounters from the mention of *νόμος τῶν Αἰγυπτίων* in connexion with *γ. ἐγγ.*, and from the doubtfulness of his assumption of the necessity for a written contract in Egyptian marriage. Edgerton's views (*JEA* 18, 95 and 19, 86) are more favourably received, but the reviewer's only conclusion is that more evidence, especially of Egyptian marriage, is needed before any safe conclusions can be drawn for the Graeco-Roman period. H. J. R(OSE), *JHS* 55 (1935), 256-7, reviews ERDMAN favourably on the whole, but regrets that the book is written solely from a lawyer's point of view and that the author has an insufficient knowledge of the early history of human culture. M. SAN NICOLÒ, *D. Lit.-Z.* 6 (1935), 1400-2, is also favourable, as is P. COLLART, *Rev. ét. gr.* 48 (1935), 588-9. C. PRADILLA, *Arch. Giurid.* 114 (1935), 124-5 summarizes the conclusions of F. BOZZA (*ubi supra*). BOZZA's view is a development of PAOLI's. *Ἐγγύησις*, originally a contract of guarantee, was used to provide evidence of *affectio maritalis* when Solon's legislation made it essential to distinguish between marriage and concubinage. B. KÜBLER, *Phil. Woch.* 55 (1935), 528-31, reviews S. G. HUWARDAS, *Beiträge zum griechischen u. gräko-ägyptischen Eherecht der Ptolemäer- u. frühen Kaiserzeit* (*JEA* 18, 95-6). Whereas HUWARDAS regards both *συγχωρήσις* and *ὁμολογία* as leading to provisional marriage, KÜBLER doubts this at least for the former. *Ὡς* in the phrase *ὡς γυναικὶ γαμετῇ* does not mean 'as if' but 'as', and a provisional marriage which was to last but five days (after which the *συγγραφή περὶ γάμου* would be executed before the *ἱεροθέται*) would have little sense. K., however, regards with favour H.'s view that the distinction between lesser and full marriage, as also that made later between *γ. ἐγγραφός* and *γ. ἀγγραφός*, lies in the fact that the fuller forms create a family community (*Hausgemeinschaft*) which gives an indefeasible right in the property to the children of the marriage, whereas the less full forms do not. Though here, too, the children have rights of succession, the family property is not assured to them on the death of one parent. E. SEIDL, *Z. Sav.* 55 (1935), 352-3, while praising G. A. PETROPOULOS, *Περὶ τῆς συζυγικῆς κοινοκτημοσύνης* (*JEA* 20, 99) notes his own disagreement. A number of contracts contain a clause in which the man says to the woman: 'To you belongs everything that I have now and that I shall acquire in future'. PETROPOULOS takes this to point to a general community of property between spouses. SEIDL thinks that it is to be taken literally and that the husband's position was in fact safeguarded by the rule which gave him the usufruct and administration of his wife's property during the

subsistence of the marriage. The clause, however, may have had the effect of a very severe penalty in case of divorce. A. A. SCHILLER's article *Lex Papia Poppaea*, *PW*, Supplementband 6 (1935), 227-32, makes use of papyrological material. See also A. LEVET, *La quotité disponible et les incapacités de recevoir entre époux d'après les lois caducaires*, *Rev. hist. dr.* 14 (1935), 195-238, where the peculiar rapacity of the fisc in Egypt as illustrated by the Gnomon of the Idios Logos is emphasized.

C. LAW OF PROPERTY

NABEH, *De proprietatis intellectu oratio tripartita*, *Mém. de l'Acad. Internat. de Droit comparé* 2, 1 (1934), 255-68: *Pars I* argues that for the Romans ownership was *ius infinitum* (residuary); *Pars II*, largely on papyrological evidence, that for the Greeks it was *ius summum*, and thus attributed to hypothecary creditors and lessees. *Pars III*, mainly *de lege ferenda*, includes comparisons with English law. In *Z. Sav.* 55 (1935), 278-88, R. TAUBENSCHLAG examines the protection of rights in immovable property in Graeco-Egyptian law. Ptolemaic law provides a remedy where there has been ouster or interference with possession, but this is only available when the plaintiff can show some ground for his possession, and the defendant may plead his better right (P. Tor. 1, now = UPZ 162, VII. 23 ff.). This remedy is thus *no interdictum uti possidetis*, but neither is it a *vindicatio*. It alleges a definite wrong on the part of the defendant. (In fact, it sounds in tort and reminds one forcibly of ejectment.) Even when, in the Roman period, Roman possessory principles have been extended to peregrines, the old action still occurs. Originally, in case of ouster, its object was restoration of possession and payment of a fine laid down by royal *διδύγμαμα*, but the tendency was to drop the fine. If there has been only interference with possession, the action is always directed towards the cessation of such interference. If the plaintiff fails, the defendant is confirmed in possession or put into possession as the case requires, and the plaintiff forbidden to disturb him. Graeco-Egyptian, like Attic law, knows a *δίκη ἐνοικίου* and a *δίκη κάρπου*, but the claim for mesne profits may be combined with the action for the recovery of the land. The article concludes with important notes on the remedies available between neighbours (*operis novi nuntiatio*, etc.). On the general question cf. WILCKEN (above, A iii). A. SCHILLER, *Res mobiles, immobiles and se moventes*, *Congr. Int. di d. r. Roma II* (1935), 431-48, considers it established not only that the distinction between movables and immovables was unimportant in Greek and Graeco-Egyptian law as well as in Roman law up to the end of the classical period, but also that the threefold classification was unknown. It is, however, a commonplace of Neoplatonism, and the decay of the distinction between *res Mancipi* and *nec Mancipi* provided legal draftsmen with their opportunity. Appearing first in *Nor. Th.* 22. 2. 3 (443) it is common in Justinian's compilations, and, as already noted by Kreller, also in the papyri of the sixth century. Coptic papyri of the eighth century have it, and it also survives in the West. Neoplatonism, S. believes, 'will eventually play no small part in the history of post-classical law'. F. MAROI, *La proprietà degli alberi separata da quella del fondo*, *Stud. et. Doc.* 1 (1935), 349-72, gives examples from many Mediterranean countries, including modern Italy and Sardinia, of property in trees separate from that in the soil. That this occurs in Greek documents from Egypt and elsewhere is well known, but M. believes that such traces as are found in Roman law, as well as the widespread system in the Middle Ages, are due to the renaissance of pre-Roman conceptions asserting themselves through 'vulgar' law when the imperial power relaxed its hold. References to an Arabic formula translated 'what is below and above the surface' will be found in M. SAN NICOLÒ's review of A. GROHMANN's *Arabic Papyri in the Egyptian Library*, 1, in *Z. Sav.* 55 (1935), 463 (see above, A ii a), but the reviewer does not agree that this is to be regarded as a true development of the Greek ἀπὸ θεμελίου ἕως ἀέρος on the ground that that phrase occurs in connexion with houses only. N. VULIĆ, *Académie royale serbe*, *Bull. de l'acad. des lettres* 1 (1935), 169-75, publishes a Greek inscription of the first or second century A.D. found at Stobi in 1931. It is apparently a deed of gift by a Jew to the sanctuary at Stobi of certain buildings erected at his expense, but reserving ἐξουσίαν καὶ δεσποτείαν (? right of residence) to himself and his heirs.

D. LAW OF OBLIGATIONS

(i) Stipulation.

G. DONATUTI, *Stud. et. Doc.* 1 (1935), 299-306, *Di un punto controverso in materia di stipulazione penale*, draws a distinction between promises of a penalty which are merely accessory to other promises, and those which are purely conditional upon the occurrence of an event not itself the subject of a promise. In the former case, but not in the latter, subsequent impossibility without his own fault releases the promisor. The subject is relevant to the discussion in A. BERGER's *Strafklauseln in den Papyrusurkunden* (1911), 75, but D., following B., admits that the question is nowhere expressly raised in the papyri.

(ii) Literal contract.

I. POPESCU-SPINENI, *Le contrat Litteris à la lumière des textes byzantins renforcés par une découverte faite récemment en Égypte, Actes du 4^e congr. int. des ét. byz.* (1935), 293-9, argues that since PSI 1182 has now shown definitely that the Verona MS. of Gaius has omissions, credence should be given to Theophilus' account of the literal contract (*Paraphr.* 3. 21), which must have been taken from a more complete text. The ordinary view that the creditor made the entry with the debtor's consent is wrong. The creditor spoke, and then the debtor wrote *expensas mihi tulisti*.

(iii) Loan.

W. H. BUCKLER, *JHS* 55 (1935), 71-8 publishes two inscriptions containing honorific decrees of the second century B.C., one from Apamea-ad-Maeandrum, the other from Paphos. The former has some legal importance, as it mentions a benefaction which took the form of paying money on the people's account and with its consent to an official who had furnished supplies to troops. In effect, this was a loan to the people itself, and probably without interest. For benefactions by way of loans without interest cf. M. N. TOD, *JHS* 54 (1934), 148 (*Greek Inscriptions at Cairness House*). In *Chron. d'Ég.* 10 (1935), 120-32 J. CVETLER gives a French résumé of his monograph on loan in the law of Ptolemaic Egypt (in Czech, Prague, 1934). One special point, i.e. that generally δάνειον is a matter of business, whereas χρεῖος is the friendly supplying of what another needs, he treats at rather greater length in *Z. Sav.* 55 (1935), 275-7. H. KRELLER's article *Mutuum*, in *PW, Supplementband* 6 (1935), 571-84, has about a column on loans in Greek law at the end.

(iv) Sale.

D. Pg. 20, A Syriac Parchment from Edessa of the Year 243 A.D., is published with a linguistic commentary by C. C. TORREY in *Zeitschrift für Semitistik u. verwandte Gebiete* 10 (1935), 33-45 (not seen). A. R. BELLINGER and C. BRADFORD WELLES, *Yale Classical Studies* 5 (1935), 95-154, give Torrey's translation, photographs, legal commentary, and essays on the constitution and chronology of Edessa. The document is a sale-homology, obviously Greek in character, but including what is apparently intended as a *stipulatio* clause and local peculiarities. The reference to 'a certain law' (νόμος in the original) concerning the liability of the seller for defects is obscure. Welles says 'presumably a law of the city of Edessa'. S. ROMANO, *Pagamento del prezzo e trasferimento della proprietà nella compravendita romana, Annali della R. Univ. di Perugia* 44 (Serie 5, vol. 11), 1934, 51 pp., offprint, holds that mancipation transferred ownership in *res Mancipi* independently of payment or security, but that one or other of these was necessary for the passing of ownership in *res nec Mancipi* or praetorian property in *res Mancipi* by *traditio*. Justinian extended the latter rule to all things, but allowed an exception if the seller renounced his right to immediate payment or security. G. G. ARCHI defends his own views (*JEA* 21, 97) against R.'s arguments in *Stud. et Doc.* 1 (1935), 115-31. G. v. BIESELER, *Congr. Iurid. Internat.* 1 (1935), 333-44, brings into the discussion *C. Th.* 1. 2. 8, with its *interpretatio* and *C. J.* 1. 19. 4, where the interpolation shows that Justinian regarded security as the equivalent of satisfaction. Classical law required payment or satisfaction only as a condition for *as auctoritatis*, Justinian, following Greek law, required it for transference on sale and delivery, but then, against classical usage, included security under *satisfacere*, and in a most un-Greek manner equated *fidem emptoria sequi* with *satisfactio*. K. D. TRIANTOPHYLLOPOULOS, 'Επί τῆς συναλλαγῆς μεταβιβάσεως κυριότητος ἐν τῷ μεταγενεστέρῳ βυζαντινῷ δικαίῳ, *Mnemosyna Pappulia* (1934), 263-9, discusses the appearance of the principle that property passes on sale, and even on a stipulation, in late scholia.

(v) Lease.

H. KORTENBEUTEL, *Gnomon* 11 (1935), 442-4, reviewing A. G. ROOS, *Papyri Groninganae* (*JEA* 20, 91-2), notes especially no. 9, a lease of A.D. 392, which, against the usual practice, issues from the landlord and is in the form of a chirograph, which at this period begins to oust the *hypomnema*. See also below G IV.

(vi) Apprenticeship.

A. ZAMBON, *Διδασκαλικά, Aeg.* 15 (1935), 3-66, examines apprenticeship and related contracts, including a number which have been published since CUGLIA's *Profilo del tirocinio industriale* (1922), and three, at present only available in translation (WINTER, *Life and Letters in the Papyri* 71), which will appear as nos. 170, 171, and 172 in *P. Mich.* III. There is a useful analysis of twenty-one documents opposite p. 14. The conclusions do not appear to differ notably from those of previous writers.

(vii) *Societas*.

E. RABEL, *Erbengemeinschaft u. Gewährleistung, Mnemosyna Pappulia* (1934), 187-212, discusses on comparative lines the light thrown by the new Gaius fragments upon the history of the Roman family, co-ownership and the rule that several heirs of one who has mancipated a thing are all bound in *solidum* to defend the buyer's title if it is attacked. The conception of family ownership is confirmed (as against the views of Albertario and Solazzi) by the new evidence for the *consortium fratrum* on their father's death, and although Bonfante's conjecture that a single co-owner is capable of making valid dispositions of the property in some cases is also confirmed, the family which is the basis of Roman law is shown to be the 'small family' of parents and children, not the more nebulous 'great family' assumed by Bonfante. The single co-owner, who can make certain dispositions, acts, not as exercising a sovereign power resident in himself, but (like, e.g., the English executor) as representing the interests of all, a position which presupposes mutual confidence among the co-owners. Gaius speaks only of dispositions concerning slaves. Probably, as in other systems, exceptions to the rule that a disposition to be valid must be made by all co-owners occurred only in the case of movables. There is a parallelism in name between the Attic *δίκη εἰς διατηρᾶν αἰσίων* and *iudicis arbitrive postulatio*; there is also parallelism in their history. The Attic action, falling as it does within the competence of the archon, seems to have been originally concerned with family property only, but its later use for common property generally is attested by the grammarians. So at Rome the XII Tables prescribe *iudicis arbitrive p.* for the division of an inheritance only, and the *lex Licinia* extends it to *res communes* generally. Other problems connected with the two actions are insoluble at present, but it is not impossible that we have here a concrete case of borrowing by the XII Tables from a Greek system of law. P. FREZZA, *Stud. et Doc.* 1 (1935), 188-96, reviewing V. ARANGIO-RUIZ, *Societas re contracta e communio incidens* (*JEA* 21, 98), reaffirms his own views against A-R.'s contention that *societas re contracta* is a post-classical conception rejected again by Justinian. A-R. replies, *Bull. Ist. Dir. Rom.* 42 (1934), 588-95 (cf. above, A iii). C. A. MASCHI, *Disertiones, Pubbl. della Università Cattolica del Sacro Cuore* (Serie 2) 45 (1935), 59 pp., agrees on this point with A-R., his chief object being, however, to show (as against Albertario) that *consortium* was at all times divisible. He relies especially on Festus' definition of *disertiones*, connecting the word with *sors*. S. SOLAZZI, *Societas e Communio, Atti dell' Accad. di Scienze morali e politiche di Napoli* 57 (1935), 26 pp., supports A-R. *Societas* never meant mere *communio rerum*. *Sui* converted their co-ownership into *societas erecto non cito* by renouncing division, and this voluntary association was the only one in which a single member, probably originally only an elective chief, had the power of disposal of which Gaius speaks. F. DE ZULUETA, *The New Fragments of Gaius Pt. II, Soc. erecto non cito, JRS* 25 (1935), 19-32, holds, as against Arangio-Ruiz and Collinet, that no formal act was needed to create *consortium* among *sui heredes*. The Egyptian analogy quoted by A-R., even if it were an ascertained fact, would have little weight in the absence of any evidence that in primitive Rome the joint family continued for several generations. While admitting that Bonfante's view of early co-ownership has been vindicated, Z. does not favour B.'s general view of the early Roman family. He thinks an adaptation of *legis aº sacramenti* was probably the method adopted for constituting artificial *consortium*, and ends with a discussion of the social purposes of the institution. V. KOROŠEC, *Rev. hist. dr.* 14 (1935), 414-15, summarizing an article published in Slovenian, agrees with Zulueta on artificial *consortium*, and explains the name *iudicis arbitrive postulatio* by supposing that a *iudex* was used for actions, e.g. on a stipulation, an *arbiter* for those *fam. etc.*, etc. F. LANFRANCHI, *Stud. et Doc.* 1 (1935), 373-8, brings Pseudo-Quintilian *Decl. Min.* 320 and 321 into the debate. 321 definitely supports the view that so long as *consortium* existed the *consors* could not make a will, and 320 appears to contrast accidental *consortium* with voluntary *societas omnium bonorum*. A. E. GIFFARD, *Rev. de phil.* 9 (1935), 82-3, so emends Varro, *de l. l.* 6, 64-5, that the passages cease to have any connexion with the discussion on *consortium*. I have not seen ZANCAN, *Per l'interpretazione di PSI XI n. 1182, 14-44*, offprint from *Atti R. Accad. Torino* 69 (1934).

(viii) Discharge of obligations.

P. MEYLAN, *Acceptilation et paiement, Extr. du 'Recueil de Travaux' publié par la Faculté de droit, Lausanne, 1934, 40 pp.*, reconciles Mitteis' theory of *sponsio* with the new Gaius by assuming that the XII Tables changed the promisee's right from an absolute one against the person to a relative one to performance, with the logical result that performance discharged. *Acceptilatio*, originally release of the *sponsor* when the act promised had been performed, as opposed to *olutio per aes et libram* for redemption when it had not, thus lost its significance and, in spite of P. Lond. II 470, could not be used where there was performance.

E. LAW OF SUCCESSION

O. MONTEVECCHI, *Aeg.* 15 (1935), 67-121, *Ricerche di sociologia nei documenti dell'Egitto greco-romano 1*, treats of the sociological material provided by wills and *donationes mortis causa*. I have not seen U. E. PAOLI, *Per l'eredità di Pirro* (Isaeus), with introduction and notes, Florence, 1935, 75 pp.

F. THE COURTS AND PROCEDURE

E. BERNEKER, *Die Sondergerichtsbarkeit im griechischen Recht Ägyptens* (Münch. Beitr., no. 22 (1935), 195 pp.), having dealt with the particular problems presented by P. Cairo Zenon 59466 in *Aeg.* 13 (1933), 25-30 (*JEA* 20, 103), here gives a comprehensive account of the special jurisdictions in Ptolemaic Egypt. Though there was a tendency to specialized jurisdiction for some matters in Greece, no direct influence on Egyptian development is traceable, but pre-Ptolemaic Egypt provided a number of examples, and in particular a connexion between the old feudal courts and the special jurisdiction for κληροί is probable, in spite of the long space of time that lies between the two. Special jurisdictions under state control are concerned in particular with the three classes of ἐπιτελεγμένοι ταῖς προσόδοις: ὑποτελεῖς, i.e. those concerned as farmers, officials, or workmen with the monopolies and taxes, including the tax-payers also if they failed in their duties, πραγματεύμενοι τὰ βασιλικά or State officials generally, and the βασιλικοὶ γεωργοί. The courts in these cases for the most part consist of single officials, but the collegiate court of the χρηματισταί is also found dealing with all three classes. The special jurisdictions extended over all cases in which even one of the parties was ἐπιτελεγμένος, except that in the case of πραγματεύμενοι only disciplinary actions against them were exempt from the jurisdiction of the ordinary court. Also the nomarch only judged certain cases concerning taxes. In general the tribunal for ὑποτελεῖς was the οἰκονόμος or the ἐπιμελητής, for πραγματεύμενοι the στρατηγός, unless the defendant was a superior in rank, and the higher officials (Epistrategus, Epimeletes, Hypodieceetes) up to the διοικητής himself, for βασ. γεωργοί the βασ. γραμματεὺς. The rules concerning disciplinary jurisdiction took precedence of others, but how cases between a ὑποτελεῖς and a βασ. γεωργός were dealt with is unknown—probably according to the rule, which appears to be general, of the *forum rei*. Military courts, the νεκτερινὸς στρατηγός in Alexandria, courts in outlying dependencies (P. Cairo Zen. 59341), and special courts for matters concerning κληροί are briefly discussed. The chief tribunals not directly under State control were those of the great royal δαυεαί; the Zenon papyri show, however, that the royal jurisdiction was concurrent with that of the landlord, though the ordinary police had apparently to ask the permission of the steward in order to carry out an arrest within the domain (PSI 366 and 367). Other private jurisdictions, those of priests and associations, come under the general heading of arbitration. Reviews by C. P(ÉAUX), *Chron. d'Ég.* 10 (1935), 409-10, and H. F. J(OLOWICZ), *JHS* 55 (1935), 255-6. M. SAN NICOLÒ, *D. Lit.-Z.* 6 (1935), 1046-8, reviews W. HELLEBRAND, *Das Prozesszeugnis im Rechte der gräko-ägyptischen Papyri, I. Tl.* (*JEA* 21, 99), favourably on the whole, though he deplores that H. was not able to make more use of native Egyptian and cuneiform material, which would have been particularly useful for the discussion of medial judgements and settlements (*Beweisurteil u. Beweisvergleich*). M. KASER, *Z. Sav.* 55 (1935), 372-6, gives a summary of the main points and is also appreciative, as is P. COLLART, *Rev. ét. gr.* 48 (1935), 432-3. E. SEIDL, *Gnomon* 11 (1935), 444-6, though laudatory, criticizes H.'s views on procedure before the Laokritai, and deplores that he was not able to use SIR H. THOMPSON'S *A Family Archive from Siut* (*JEA* 21, 92), from which it appears at least possible that a witness was called by the party. H. VOLKMANN, *Zur Rechtsprechung im Principat des Augustus* (Münch. Beitr. no. 21, 1935), keeps strictly to the evidence available for his period, and consequently finds little papyrological material on which to draw. In his treatment of the Cyrenaic edicts he follows v. Premerstein, holding in particular (against Stroux and Wenger) that two sorts of 'capital' case are distinguished, and that the governor is bound to lay those which might lead to a death-sentence before a jury court. Jurisdiction is interpreted in a wide sense, so as to include not only the emperor's domestic jurisdiction and *renuntiatio amicitiae* but also the settlement of disputes arising in client states. The general conclusion is that Augustus held supreme judicial power from the first and that his *auctoritas* was not merely personal and moral, but a matter of constitutional law. G. I. LUZZATTO, *A proposito delle Θανατοφόροι Δίκαι δι' Κύρηναι, Stud. et Doc.* 1 (1935), 108-14, argues that the rule (Edict i, ll. 33 ff.) forbidding Roman citizens to prosecute a Greek for the murder of a Greek unless they are former Greeks and the victim was a relation, is derived from Greek, not Roman, usage. In the papyri, too, prosecution for murder was a matter for relations (TAUBENSCHLAG, *Strafrecht*, 81). J. N. COROI, *Le Conventus juridicus en Égypte aux trois premiers siècles de l'Empire romain, Actes du 4^e congr. int. des ét. byzantines* (1935), 363-81, gives an account of the circuit system, touching also on the officials present, the method

of procedure, *παράγγελία*, and the vexed question of its relation to the Sicilian *dicae scriptio*. The voluminous notes form a bibliography in themselves. J. LENGLE, *Hermes* 70 (1935), 312-21, *Zum Prozess Jesu*, takes the view that the Synhedrion had capital jurisdiction in capital cases involving religious offences; that the Roman magistrate could exercise control over the composition of the court (cf. the Cyrenaic edicts), but that the sentence was not subject to confirmation by him. Pilate consequently did not confirm a sentence imposed for breach of religious law, but himself condemned Jesus, by the wish of the Synhedrion, as a political offender. P. COLLINET's *La procédure par libelle* (*JEA* 20, 103) continues to be the subject of debate. E. BALOGH, *Beiträge zum justinianischen Libellprozess*, *St. Riccobono* II, 449-519 (offprint, 1935), accepts C.'s view of the origin of libellary procedure in a generalization of privileged procedure between 474 and 486 or 487, as also C.'s distinction between two phases in the introductory stage, the first in which the parties stated their cases on the facts and a second in which the advocates put the opposing contentions into legal form, but disagrees on *editio actionis*, *postulatio simplex* and *litis contestatio*. A. E. GIFFARD, *Études sur la procédure civile du Bas-Empire, I: Les procès des privilégiés et la procédure de droit commun à la fin du V^e siècle*, *Rev. hist. dr.* 14 (1935), 239-51, also notes his disagreement with COLLINET on *postulatio simplex*, *litis contestatio* and the purport of *C.J.* 12.25.4, where the *mandata alicuius* cannot refer to *litis denuntiatio*, that being shown to have been impossible in the case of privileged persons even before 474 by *C.J.* 12.20.4. The purpose of *C.J.* 12.25.4 is to prohibit oral citation while at the same time not subjecting *ministeriani* to increased expenses. The enactment of Marcian referred to in § 3 is the famous *Nov. Marc.* 1 of 450, which *C.J.* 12.21.8.9 (not itp.) is also intended to preserve. It is this const. also which GIFFARD promises will provide the key to the date of the generalization of judicial summons. In *Rev. hist. dr.* 14 (1935), 732-3, *Note sur la date d'apparition des exsecutores litium dans les textes législatifs du Bas-Empire*, GIFFARD attacks the common view that the first legislative mention of *exsecutores* is in *C.J.* 1.3.25 of A.D. 456. They occur in *C.J.* 9.39.2 of A.D. 451, and though they are there concerned with criminal matters, *Nov. Marc.* 1.1 of A.D. 450 shows that the method of summons in civil and criminal matters was the same. He also refers to a forthcoming article in *Stud. et Doc.* A. STEINWENTER, *Eine kirchliche Quelle des nachklassischen Zivilprozesses*, *Congr. Iurid. Internat.* 2 (1935), 125-44, calls attention to the light thrown on civil procedure by the account of the dispute between the Catholics and the Donatists held in A.D. 411 before an imperial commissioner (MASSI, *Amplissima Collectio* IV, 51 ff.). Though the proceedings were not strictly legal, legal forms were closely observed. The four months' interval of the procedure by *litis denuntiatio* applied, most of the sitting was in fact taken up by technical *moratoriae praescriptiones* put forward by the Donatists, and S. also finds support for his view (as against Collinet's) that *litis contestatio* took place after dilatory pleas had been disposed of by a contradictory proceeding in which the defendant's *responsio* followed the *propositio* of the plaintiff. It also appears that *denuntiatio apud acta* meant not only that the official with the *ius acta conficiendi* had to be informed but that the summons, though addressed to the defendant in the second person, was officially served. Further examples of legal gleanings in ecclesiastical literature are given by STEINWENTER in *Die Konzilsakten als Quellen des profanen Rechts* (*Mnemosyna Pappulia*, 1934, 245-51), and the Donatist dispute also figures in his *Die Anfänge des Libellprozesses* (*Stud. et Doc.* 1 (1935), 132-52). Here S., as in his review *Z. Sav.* 54 (1934), 373-82, criticizes the conclusions reached by Collinet. The libellary procedure cannot have been generalized as late as 474-86. In *C.J.* 12.25.4.1 (474) the words which forbid *ministeriani* to be summoned *nudis cuiuscumque mandatis* refer to orders of any judge other than the *magister officiorum*, not to *denuntiatio* by 'any' plaintiff, and are therefore no proof that procedure by *lit. den.* was still in force for ordinary cases. The Syro-Rom. Law-book, it is true, refers to procedure which can only be that by *lit. den.*, but Nallino has shown that it includes much already obsolete when the Greek original was compiled, and among its sources is *C.J.* 1.3.32.5 of 472, which refers to *conventio per executorem*, a mark of libellary procedure. The latest evidence of *lit. den.* is *Nov. Val.* 8.1 of 440, but this is later than the earliest example of libellary procedure in P. Oxy. 1881 of 427. S. consequently returns to a modified form of Bethmann-Hollweg's view that the new procedure was first used for cases exempted from *lit. den.* All early examples known come under the headings enumerated in *C. Th.* 2.4.6 of 406. That constitution does indeed seem to contemplate summary proceedings without any written statement of claim, but it must not be so interpreted, for suits under 100 *aurei* are among those exempted, and yet nearly all written claims in the papyri after 406 are for smaller amounts. S. rejects Collinet's view that libellary procedure was modelled on that used for privileged persons or that by rescript, and holds that there is no real break in the development. But the *libellus* cannot have grown directly out of *denuntiatio*. In Egypt, where administrative summons had always been the practice, *lit. den.* in accordance with imperial law never really took root, and with the introduction of the *libellus* the 'foreign body' was rejected again. E. BETTI,

Struttura e funzione processuale dei libelli conventionis e contradictionis, Congr. Int. di d. r., Roma II (1935), 145-57, rejects Collinet's view of *postulatio simplex*, and distinguishes two phases through which the *libellus* passes, the first in which it is served on the defendant and the second in which the name of the action must be stated. *Litis contestatio* took place *post* (= *per*) *narrationem et contradictionem objectam*, but some of its effects were then dated back to the moment of *conventio*. Thus is explained the difficulty of *O. Th.* 4.14.1 (STEINWENTER, *Z. Sav.* 50 (1930), 187); time for prescription will begin to run again as from the date of *conventio*, but only if *l.c.* has taken place. E. BALOGH, *Beiträge zur Zivilprozessordnung Justinians*, 1: *Zur Entwicklung des amtlichen Kognitionsverfahrens bis zu Justinian*, Congr. Int. di d. r., Roma II (1935), 269-359, unlike Berneker, is sceptical about the influence of Ptolemaic procedure on *cognitio extraordinaria*. His views on the history of *denuntiatio* are partly in agreement with Boyé's; in particular, as against Wlassak, he believes that the reform of M. Aurelius recorded by Aurelius Victor referred to Rome, and that the Roman development was the pattern for the later generalized procedure. An excursus discusses the date at which the true formulary procedure was superseded in the provinces. L. WENGER, Congr. Int. di d. r., Roma II (1935), 197-219, *Einige Bemerkungen zur historischen Behandlung des römischen und justinianischen Zivilprozessrechts*, insists that a straight line of development leads from the royal jurisdiction of the earliest times to the all-embracing imperial jurisdiction of Justinian, in which the *iudicium privatum*, controlled by magisterial *imperium* and not extending to the provinces, constitutes no real break. W. touches on papyrology with reference to Byzantine submissions to arbitration (p. 214). B. BIONDI, *Il processo civile giustiniano*, Congr. Int. di d. r., Roma II (1935), 161-93, emphasizes the legislative force of Justinian's compilation taken as a whole. Old expressions receive an entirely different meaning in a system of law which is based on *cognitio*, and in which the material evolved historically under the influence of the *iudicium privatum* has become the command of the legislator. Note also E. WEISS, Article *Exekution* in *PW*, Supplementband 6 (1935), 56-64, which uses papyrological as well as ancient Greek sources.

G. PUBLIC LAW

(i) International law.

The chief thesis in A. HEUSS, *Abschluss u. Beurkundung des griech. u. röm. Staatsvertrages* (*Klio*, N.F. 9 (1934), 14-53, 218-57), is that committing a treaty to writing is never a form binding the contracting parties at international law, but at most evidence that the treaty has been concluded. The binding formality consists in the oral oaths. For Rome, Täubler's theory that there is a difference in the effect of treaties according as they are concluded by an act of the people, the senate, or the magistrate, is rejected. The question of the treaty-making power is one of municipal, not international, law. Against T.'s theory is also A. PASSERINI, *Athenaeum* 13 (1935), 57-72, who has important new suggestions for the restoration of the fragmentary Latin treaty between Rome and Callatis edited by S. LAMBRINO, *C.-R. Ac. Inscr. et B.-L.* (1933), 278 ff. Short note on P.'s article by G. D. S., *Riv. di fil.* 13 (1935), 424-5. E. WEISS, *Mnemosyna Pappulia* (1934), 285-90, explains *παπακαταριθμεῖν τὰ πράγματα οὐρνηπεῖν* in the will of Ptolemy the Younger of Cyrene (*JEA* 20, 103) as intended to refer to the Senate's practice, evidenced in the cases of Pergamum and Pontus, of deciding by special decree that the acts of the previous ruler should be confirmed. This did not go without saying in ancient times when one government succeeded another. For other literature on this subject v. M. N. TOD, *JHS.* 55 (1935), 223.

(ii) State Socialism.

C. PRÉAUX, *La difficulté de requérir le travail dans l'Égypte lagide*, *Chron. d'Ég.* 10 (1935), 343-60, takes up the idea of her earlier article (*ibid.*, 109-19, v. *JEA* 21, 99) that in spite of the theory of State Socialism, the royal power was too weak to overcome the forces of individualism, and shows how frequently it was forced to make use of contractual relations in order to get the necessary work done. The oath, too, was often introduced into contracts made with the administration in order to facilitate their enforcement by making breach equivalent to perjury.

(iii) The Prefect of Egypt.

O. W. REINMUTH, *The Edict of Ti. Julius Alexander*, *Trans. Am. Phil. Ass.* 65 (1934), 248-59, argues that it corresponded closely with the first part (*genus provinciale*) of Cicero's Cilician edict, i.e. concerned itself with the province as a revenue-producing area. He rejects Wilcken's explanation (*Z. Sav.* 42 (1921), 124-58) that Alexander's object was to secure his own position in Egypt when Galba was proclaimed, and explains the

publication of the edict almost two years after A. became prefect on the ground that such an edict was regularly promulgated at the beginning of each *lustrum* during the first half of the first century. He also suggests that ἀρογγραφαί may have been ordered in these quinquennial edicts. In *The Prefect of Egypt from Augustus to Diocletian*, *Klio*, Beiheft 21 (1935), he collects a considerable amount of additional material on the prefect's legal and other activities, but seems to have hardly enough technical knowledge to make his treatment of the legal problems really useful. H. BOY, *Cl. Quart.* 29 (1935), 39-40, by an attractive emendation in Philo, *In Flaccum*, finds evidence for the existence of an εἰσαγωγεὺς among the officials of the prefect's chancery.

(iv) Mining law.

In *Attische Pachturkunden*, *Archiv* 11 (1935), 189-217, A. WILHELM provides a new text of the decree of the deme Ταρπύσιοι granting a perpetual lease (*Ath. Mitt.* 49, 1 ff.) and of the State lease to Socles (*I.G.* II², 411), which in all probability concerned a silver mine. In the first of these he suggests that κληρονομία [ἐπὶ] ἀμφοτέροις may mean 'successors, in particular descendants in the male or female line', in the second the provision that the State and Socles are to benefit in alternate years is compared (with reference to E. SCHÖNBAUER's *Bergbaurecht* and articles in *Z. Sav.* 45 and 46) to the provisions in the *Lex metalli Vipascensis* for the sharing of proceeds between the contractor and the *fiscus*. SCHÖNBAUER, in his turn, *Vom Bodenrecht zum Bergrecht*, *Z. Sav.* 55 (1935), 183-225, accepts Wilhelm's reconstruction, and in reply to U. KAHRSTEDT, *Staatsgebiet u. Staatsangehörige, Studien zum öffentlichen Recht Athens*, *TL* 1 (1934) (not seen) and others, reaffirms his view that the Athenians knew of no separate ownership in minerals. A. B. WEST, on the other hand, reviewing Kahrstedt favourably in *Cl. Phil.* 30 (1935), 354-7, accepts his opinion that in addition to mines on State lands there were others in private hands on which a fixed proportion of the annual production had to be paid as tax.

7. Palaeography and Diplomatic

A handbook of Greek palaeography in Modern Greek by A. SIGALAS, *Ἱστορία τῆς Ἑλληνικῆς Γραφῆς*, Salonica, 1934, pp. viii+327, 244 figs. in text, though useful as a summary, offers little new to the papyrologist, and the wealth of illustrations is counterbalanced by their poor quality. Praised by E. KORNEMANN in *Klio* 10 (1935), 199-200.

The early history of the papyrus codex has been further illuminated by the new fragment of St. John's Gospel in the Rylands library published by C. H. ROBERTS (see § 2 above). This tiny scrap of a codex can be dated without hesitation within the first half of the second century A.D. It thus rivals P. Lond. Christ. 1 in antiquity, and is certainly the earliest MS. of any part of the New Testament. The complete codex is not likely to have contained more than the single Gospel, which would have filled about 66 leaves. Calculation makes it probable that Ἰησοῦς was written out in full. Provenance is unknown, but may well be Oxyrhynchus. In SIR F. G. KENYON's fifth fascicule of the Chester Beatty papyri (see § 2), it is noticeable that he now (p. ix) accepts the date proposed by BELL, SCHUBART, and WILCKEN for P. Beatty VI (Numbers and Deuteronomy), and consequently places it in the first half of the second century; furthermore, the use of IC or IHC for Joshua proves it to be a Christian production. When complete the codex must have consisted of 108 leaves, either in one large quire or a succession of 2-leaf ones. It is written, like P. Bad. 56, in two columns to a page, whereas P. Ryl. Gk. 457 and P. Lond. Christ. 1 have one column only, an arrangement typologically more primitive if the current derivation of the codex from the waxed tablet is admitted.

P. COLLART, *Livres neufs ou vieux bouquins? (Platon, Apologie de Socrate, 26 d-e)*, in *Mél. O. Navarre*, 95-9, discusses Socrates' statement that the works of Anaxagoras were on sale at Athens for one drachma. He defends the view of GLÖTZ, that MSS. of these long-outmoded doctrines would be 'white elephants' by the date of the trial, and that the statement is therefore valueless for the price of papyrus, against N. LEWIS, who in his recent book, *L'industrie du papyrus* (*JEA* 21, 99), 54 ff., invoked the passage as a witness to the comparative cheapness of the material. COLLART is no doubt in the right, but LEWIS's main contention, that χάρτης means a roll and not, as GLÖTZ took it, a single sheet of papyrus, remains unshaken. Appreciative reviews of LEWIS's book come from G. ROUILLARD, *Rev. critique*, 1934, 82-4; P. COLLOMP, *Rev. ét. anc.* 37 (1935), 514-15; T. C. SKEAT, *JHS* 55 (1935), 94-5; O. MONTEVECCHI, *Boll. filol. class.* 6 (1935), 202-3.

G. PASQUALI's *Storia della tradizione e critica del testo*, Firenze, 1934, pp. xx+485, may be mentioned here, as it makes considerable use of the evidence of texts on papyrus.

P. GÄCHTER, *Zur Textabteilung von Evangelienhandschriften*, in *Miscellanea Biblica* (the 'Silver Jubilee' volume of the Pontificium Institutum Biblicum), i, pp. 181-200, is a brief but interesting study of the

punctuation of early Biblical MSS. He points out the remarkable coincidences in line-division between certain MSS., presumably due to a common archetype and foreshadowing a new factor for determining the derivation of our texts. In its original and suggestive character the article recalls A. C. CLARK's pioneer *Primitive Text of the Gospels and Acts*, of which GÄCHTER appears to be unaware.

B. L. ULLMAN, *Two Latin Abecedaria from Egypt*, *Am. Journ. Phil.* 56 (1935), 147-8, discusses the two alphabets in one of the Antinoë papyri (4th-5th cent. A.D.) published in H. J. M. MILNE's *Greek Shorthand Manuals* (*JEA* 21, 100). He points out that in the second alphabet, in rustic capitals, Z is followed by equivalents for various Greek sounds, CH, PS, AE, OE. The first alphabet, in 'mixed' uncials, has the name of each letter written above it in Greek, and the occurrence of the dissyllabic forms $\omega\phi\epsilon$, $\alpha\lambda\epsilon$, etc. suggests that these are not merely much older than had been generally supposed, but are actually the original Roman forms. He also points out the palaeographical significance of the occurrence of the two types of script side by side. MILNE's book has received an important review from A. MENTZ, *Phil. Woch.* 55 (1935), 627-34, who among other things points out the rule governing the sequence of vowels in the different members of the tetrads or pentads. The literary and lexicographical content of the tetrads provides J. STROUX with material for an excellent article, *Aus einem neuer KOMENTAPION griechischer Kurzschrift*, in *Philologus* 44 (1935), 78-89. His most attractive discovery is that of a list of plays by Menander, some of which are new. Other notices are by M. HOMBERT, *Chron. d'Ég.* 10 (1935), 387-8, and F. ZUCKER, *BZ* 35 (1935), 170-1.

S. EITREM, *Fragment of a Greek Cryptogram in the Oslo collection*, *Mél. Maspero* 2, 113-17, with plate, publishes a very mutilated scrap of the same papyrus which HUNT edited in the Proceedings of the British Academy (*JEA* 16, 124). For the contents cf. § 2 F above.

The customs receipts published by A. E. R. BOAK, *Soknopaiou Nesos*, pp. 23-33 and Pl. xiii, have a good series of seals, the usual design being imperial portraits (of the Severi) or an Apis bull, with inscriptions denoting the nature of the tax or the place of collection.

8. Lexicography and Grammar

The article by J. VERGOTE entitled *Het problem van de koine in het licht der moderne linguïstiek in Philologische Studiën* 5 (1933-4), 81-105, and 6 (1934-5), 81-107 is a very well informed and competent history of researches in this subject; the writer defines his own standpoint on the questions involved, which include that of Hebrew influence and the more recently raised question of Coptic influence.

H. G. MEECHAM, *The Letter of Aristaeas, a Linguistic Study with Special Reference to the Greek Bible*, Manchester University Press, 1935, xxi+355 pp., contains a reprint of Thackeray's text of the letter, with a study of its vocabulary and other linguistic features. Use is made of an earlier study (which I have not seen) by P. TRAMONTANO, *La Lettera di Aristea a Filocrate*, Naples, 1931, of which there is a review by C. DEL GRANDE in *Riv. indo-greco-ital.* 18 (1934), 113-14.

G. GHEDINI, *Note di sintassi greca*, in *Aeg.* 15 (1935), 230-8, is concerned with (1) the free use of the genitive absolute; (2) $\epsilon\acute{\alpha}\nu$, $\sigma\tau\alpha\nu$, $\delta\sigma'$ $\alpha\nu$ with the indicative; (3) $\delta\acute{\omega}\sigma\epsilon\iota\varsigma$, $\theta\acute{\eta}\sigma\epsilon\iota\varsigma$ to be understood as $\delta\acute{\omega}\sigma\eta\varsigma$, $\theta\acute{\eta}\sigma\eta\varsigma$; and (4) the distribution of $\epsilon\acute{\nu}\epsilon\kappa\alpha$ and $\epsilon\acute{\nu}\epsilon\kappa\epsilon\upsilon$ according to date.

P. COLLART in *Aeg.* 14 (1934), 496, supports JOÜON, *Rech. sc. relig.*, 1934, 93-5 (with reference to Matth. xxviii. 59), by quoting $\sigma\omega\delta\acute{\omicron}\nu\alpha$ $\kappa\alpha\theta\alpha\rho\acute{\alpha}\nu$ = white cloth from *Pap. Gr. Mag.* iv, 3095, v, 220 Preisendanz. In *Aeg.* 14, 496-7, W. A. OLDFATHER discusses the meaning of $\kappa\alpha\theta\acute{\alpha}\rho\epsilon\iota\omicron\varsigma$, $\kappa\alpha\theta\acute{\alpha}\rho\iota\omicron\varsigma$, and $\kappa\alpha\theta\alpha\rho\acute{\omicron}\varsigma$. The meaning of $\pi\rho\omicron\sigma\kappa\acute{\alpha}\nu\eta\sigma\iota\varsigma$ is studied by G. C. RICHARDS in *Cl. Rev.* 48 (1934), 168-70. In *Z. Sav.* 55 (1935), 288-91, L. SCHNORR VON CAROLSFELD argues that $\epsilon\lambda\acute{\alpha}\tau\tau\iota\omicron\varsigma\mu\alpha$ in certain late papyri means malicious disposition, desire to get the better of the other party. In the same journal, pp. 275-7, JIRÍ CVETLER summarizes in German his Čech dissertation on the difference between $\delta\acute{\alpha}\nu\epsilon\iota\omicron\nu$ and $\chi\rho\acute{\eta}\sigma\iota\varsigma$. BROB OLSSON argues in *Archiv* 11 (1935), 219 that $\delta\kappa\alpha\tau\eta\rho\acute{\alpha}\nu\iota\omicron\nu$ is a diminutive of $\delta\kappa\acute{\alpha}\tau\iota\omicron\nu$, citing $\kappa\alpha\tau\eta\rho\acute{\alpha}\nu\iota\omicron\nu$ from P. Bad. 95. 106 (7th cent.), and that $\pi\epsilon\lambda\epsilon\kappa\acute{\alpha}\rho\omicron\varsigma$ in *Ostr.* II, 720, is the genitive not of a proper name but of $\pi\epsilon\lambda\epsilon\kappa\acute{\alpha}\varsigma$ 'Axtschmied'. O. MONTEVECCHI in *Aeg.* 15 (1935), 303-4, interprets $\acute{\alpha}\phi\acute{\eta}\lambda\iota\kappa\omicron\varsigma$ in P. Oxy. 2134 as a proper name. The article *Les noms des planètes et l'astrolâtrie chez les Grecs*, by F. CUMONT, in *L'Antiquité Classique* 4 (1935), 5-43, aims at the dating of texts by means of these names.

The chronology of the passage of β into a spirant is discussed by H. ZILLIACUS in *Eranos* 33 (1935), 63-74, with the help of papyrus evidence. The article, which is written in Swedish, is illustrated by four graphs. I have not yet seen the same writer's work entitled *Zum Kampf der Weltsprachen im oströmischen Reich*, Akadem. Abhandl. Helsingfors, 1935, 8°, 239 pp. [but see § 5 D above].

It is announced by P. KRETSCHMER in *Glotta* 24 (1935), 84 that an index of the Greek language on the *a tergo* principle of arrangement is in preparation at Vienna.

9. General Works, Bibliography, General Notes on Papyrus Texts

A. GENERAL WORKS

MEDEA NOBIS has contributed an excellent general account of papyrology to the *Enciclopedia Italiana*, vol. 26, 1935, 257-63, art. Papirologia.

K. PREISENDANZ'S *Papyrusfunde u. Papyrusforschung* (*JEA* 21, 102) is reviewed very appreciatively by F. ZIMMERMANN in *Phil. Woch.* 55 (1935), 463-5; E. KIESSLING, in *Z. f. Bibl.* 51 (1934), 321-4, is no less laudatory, but criticizes certain aspects of the book.

J. G. WINTER, *Life and Letters in the Papyri* (*JEA* 21, 103), is reviewed by W. M. CALDER, *Cl. Rev.* 49 (1935), 72-3, and G. GHEDINI, *Aeg.* 15 (1935), 334-5.

Papyri u. Altertumswissenschaft (= *Münch. Beitr.* xix) (*JEA* 21, 103) is reviewed by O. EGER in *Z. Sav.* 55 (1935), 368-72.

Aegyptus, 14 (1934), fasc. 2-3, is reviewed by C. PRÉAUX in *Chron. d'Ég.* 10 (1935), 413-15.

Études de Papyrologie II. 2 is reviewed by V. CHAPOT, *Rev. ét. anc.* 37 (1935), 245-6, and by W. SCHUBART, *Gnomon* 11 (1935), 623. In the Edict of Diocletian Schubart reads (ll. 9-10): καὶ τοῦ αὐτοῦ συν(ν)η(ν)ωμένου βρεσίου (ὡν) τὰ ἀντίγραφα (διὰ) τούτου μὲν τοῦ διατάγματος δημοσίᾳ προέταξα, ἐνεστί πᾶσι συν(ν)α(εἰ)ν.

B. BIBLIOGRAPHY

The following bibliographies and kindred compilations are continued:

P. COLLAERT, *Bulletin Papyrologique XIV* (1934); *Rev. ét. gr.* 48 (1935), 551-81.

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M. HOMBERT, *Bulletin Papyrologique VIII*, in *Byzantion* 10 (1935), 341-66.

PAPYRUSKUNDE, in the general bibliography of *BZ* 35 (1935), 166-8, 448-9.

C. C. EDGAR, *Papyri*, in the *Year's Work in Classical Studies*, 1934, 71-8.

A. CALDERINI, *Bibliografia metodica*, *Aeg.* 15 (1935), 345-81. *Testi recentemente pubblicati*, *Aeg.* 15 (1935), 305-19.

C. GENERAL NOTES ON PAPYRUS TEXTS

Since O. O. KRUGER's important article *Papirologicheskie Zametki* ('Papyrological Notes') in *Problemy Istorii dokapitalisticheskikh Obshchestv* ('Historical Problems of pre-Capitalist Society'), nos. 9-10 (1934), 204-10, will be read in the original by only a select few, I am glad to avail myself of notes made by Prof. Baynes. Important reviews of P. Ross.-Georg. III, P. Ryl. Zen., and P. Würzb., are followed by a section *Neponyatnie Tekstui* ('Misunderstood Texts'), in which the following readings are proposed: S.B. 7352, 22-3, for ὑστερον σοι ἐπέγγων read ὑστερον σφεδρὲς ἐγγων. S.B. 7356, 7-8, θεῶν θελόντων begins a new sentence; ἐργασίαν διδόναι = 'carry out military duties'. *Ibid.* 19, σπαρεία = the march to the military camp. *Ibid.* 22, εἰς τὰς δευτέρας τήχας = 'against the dark days', cf. Maurice, *Strategikon* 7, 8, p. 142. S.B. 7357, 18-20, for ἐρωτηθεὶς δὲ ἵππος σοι χρεῖς ἐστὶν ἐνθάδε read ἐρωτηθεὶς δ' εἰ τινος σοι χρεῖς ἐστὶν ἐνθάδε. P. Oxy. 2133, 16, for ὡς ἂν πε[.]λοι. as read πεδ[ο]ποιείας (= παιδοποιείας). S.B. 7206, 1, for [c. 9-10 ll.] ιανου Ἀρε[α]νῶι τῷ δε[σ]πο[σ]το[σ]τάτῳ ἡγεμ[ό]νι read [Πομπωρίῳ] Ἰανου[α]ρίῳ, the Prefect of Egypt already known from P. Thead. 18 and P. Oxy. 1115 (284 A.D.). O. Strassb. 776, 6, for ἐν διασζμοι γεναμένης read ἐνδίας (= ἐνδείας) μοι (or ἐμοί) γεναμένης. F. Bilabel, *Fragmente a. d. Heidelb. Papyrussammlung*, *Philologus* 80 (1925), 331-41, no. 2, l. 11, for τὸ ἄμα (in answer to the query τί εἴρηχον;) read τόμα. S.B. 6002, 10-11, punctuate after πέντε, not after φόρον.

The *Lesefrüchte* of A. G. Roos, published in *Mnemosyne* 62 (1935), 233-44, include some excellent proposals for the texts and interpretation of Strabo, Josephus, and Philo; nearly all will be of interest to students of papyrology, but the suggestion which deserves particular notice here is his brilliant correction καὶ ἄλλων for the incomprehensible καὶ ἄλλων in the title of the Idiologus in P. Rainer 104. The basis of the suggestion is a Latin inscription from Ephesus erected in honour of ex-Idiologus Ti. Claudius Balbillus, probably the man of that name who later became Prefect of Egypt (A.D. 55-9); here the word *lucorum* occurs in exactly the same position as ἄλλων (sic) in the Greek.

In *Aeg.* 14 (1934), 452-462, J. C. NABER continues his bold emendations of P. Cair. Zen. (cf. *JEA* 21, 86), but I must confess that I find most of them highly improbable, in spite of the weight of learning with which they are supported.

Aeg. 15 (1935), 320 contains the usual collection of *Aggiunti e correzioni, riedizioni di papiri e di ostraca*.

10. Miscellaneous, Excavations, Personal

The Fourth International Congress of Papyrology, held at Florence from 28 April—2 May 1935, was very successful. For accounts of its proceedings see *Aeg.* 14 (1934), 497–8; 15 (1935), 342–4; H. KORTENBEUTEL, *Gnomon* 11 (1935), 399–400; P. COLLART, *Rev. hist. dr.* 14 (1935), 391–3. The papers read are apparently to be printed in *Aegyptus*. Plans for the Fifth Congress, to be held at Oxford 30 August—3 September 1937 are already well advanced, and invitations will be issued shortly.

In *Chron. d'Ég.* 10 (1935), 417–18, TH. HOPFNER announces that he has presented the library and collection of papyri bequeathed to him by WESSELY to the University of Prague, the Greek papyri going to the University Library, the Oriental to the Oriental Institute. The entire collection comprises 8202 pieces, of which 7032 are Greek. The date on which the collection is to be made accessible to the public will be announced in a later number of the same journal.

W. CRÖNERT in *Gnomon* 11 (1935), 175–6, suggests that DR. H. IBSCHER should be permitted to try his unrivalled skill on some of the better preserved Herculaneum papyri.

Most readers of this Bibliography will probably have learned from the printed notice circulated in February of this year that the GRENFELL AND HUNT PAPYROLOGICAL LIBRARY has now been formally opened in the Ashmolean. Gifts of books and offprints should be addressed to the Librarian, Ashmolean Museum, Oxford.

An important article from a Russian savant, N. TICHONOV, *Une nouvelle méthode pour la conservation des papyrus*, appears in *Chron. d'Ég.* 10 (1935), 254–65. He advocates: (1) dissolving out the salts usually present in papyri with alcohol, (2) impregnating the papyri, if in good condition, with a thin gelatine solution, or, where the fragments are brittle, strengthening with a celluloid solution diluted with alcohol and brushed on; where they are discoloured, bleaching with 2 per cent. solutions of permanganate of potash and oxalic acid applied successively, (3) totally enclosing the papyri in gelatine, by laying them out on a gelatine sheet and pouring liquid gelatine over them; the outer surface of the gelatine covering is then protected from wear by a thin coat of celluloid. It would be interesting to see some examples of papyri treated by this method; but the great disadvantage seems to be that rearrangement of fragments, adjustment of displaced fibres, etc. would be impossible once the papyri had been so mounted; and although the author claims that the gelatine can be completely removed with hot water, this process must surely endanger the papyrus.

The final report on the University of Michigan excavations at Dimē in 1931–2 has just been issued: A. E. R. BOAK, *Soknopaiou Nesos*. Univ. of Michigan Press, Ann. Arbor, 1935 (= Univ. of Michigan Studies, Humanistic Series, vol. xxxix). Pp. xii + 47, 13 Pls. in text and 16 Plans at end. Price \$2.50. The centre of the mound having been removed by *sebbakhin*, two small areas on opposite sides of the 'devastated area' were chosen, and excavated down to bed-rock. One of these, on the east side of the mound, revealed a remarkable building, the doors and walls of which were lined with wood-blocks. A crude wall-painting apparently depicting a sacrifice to Soknopaios also came to light, while the decline which led to the final abandonment of the site about A.D. 250 was revealed by retaining walls, built to keep out the encroaching sand of the desert, in the topmost layer. In the west area, immediately to the south of the great temenos wall, there was evidence of two temporary abandonments of the site, which Boak tentatively dates to the late third-early second century B.C., when the Thebaid was in revolt, and the late first century B.C. The precarious hold on existence enjoyed by the community is best explained by the fact that it seems to have been entirely dependent for water on the Ptolemaic high-level canal recently traced by Miss Caton-Thompson. The customs receipts published in this volume have already been referred to (§ 3 above).

Further obituaries of HUNT have appeared: H. I. BELL, *Arthur Surridge Hunt*. Proceedings of the British Academy, vol. xx. London. 1935. Pp. 16. F. DE ZULUETA, *A. S. Hunt*, in *Stud. et doc.* 2 (1935), 486–8. L. WENGER, *Arthur S. Hunt: In Memoriam*, *Jahrb. Bayer. Akad. d. Wiss.* 1934–5. A. B. SCHWARZ, *Arthur Surridge Hunt* (in German and Turkish) *Capitolium*, Istanbul, 1935. U. WILCKEN, *Nachruf*, in *Archiv xi*, 318–19, commemorates the passing of three great figures in Egyptian studies—Hunt, Griffith, Sethe.

Obituaries of ANTON VON PREMERSTEIN, who died 6 February 1935, are contributed by W. K[UMITSCHER] and C. F. L[EHMANN]-H[AUPT] to *Klio* 28 (1935), 215, and by W. ENSSLIN to *Z. Sav.* 55 (1935), 500–1.

GIROLAMO VITELLI died on 2 September 1935. There are obituary notices by G. A. AMATUCCI in *Boll. filol. class.* 7 (1935), 73–6, and P. COLLART in *Bull. Budé* 49 (1935), 56–66, while E. BRECCIA prints some reminiscences under the title *In Egitto con Girolamo Vitelli* in *Aeg.* 15 (1935), 255–62.

Two other pioneers of papyrology, PAUL M. MEYER and OTTO GRADENWITZ, have passed away during the year, on 28 March and 7 July 1935 respectively. C. F. L[EHMANN]-H[AUPT] writes a notice of the former in *Klio* 28 (1935), 214.

BIBLIOGRAPHY: CHRISTIAN EGYPT (1935-1936)

By DE LACY O'LEARY, D.D.

The abbreviations used are to be found on pp. 55-56 above, with the exception of the following:

Nouv. Rev. Théol. = *Nouvelle Revue Théologique*.

WZKM = *Wiener Zeitschrift für die Kunde des Morgenlandes*.

OCP = *Orientalia Christiana Periodica*, Rome.

1. BIBLICAL

(a) Old Testament.

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W. E. CRUM, *Un psaume en dialecte d'Akhmim* . . . (cf. *JEA* 21, 108) is reviewed by L. TH. LEFORT in *Muséon* 48 (1935), 234-5: the reviewer thinks that the text shows 'les efforts d'un jeune grec débutant en copte'.

K. KORTENDEUTEL and A. BÖHLIG, *Ostrakon mit griechisch-koptischem Psalmentext*, in *Aeg.* 15 (1935), 415-18, 2 figs., gives the passage Ps. 118. 10-11.

(b) New Testament.

The new Cairo edition of *ⲛⲓⲁⲱⲙ ⲛⲧⲉ ⲛⲁⲓⲱⲛⲓ ⲛⲧⲉⲣⲓ* . . . (cf. *JEA* 21, 108) is reviewed by L. TH. LEFORT in *Muséon* 48 (1935), 237-8, who points out the uncritical character of the text, which repeats that of Tattam's edition of 1847-52 and takes no note of Horner's edition.

H. I. BELL and T. C. SKEAT, *Fragments of an Unknown Gospel and other Early Christian Papyri*, in *Aeg.* 15 (1935), 335-6 deals with P. Egerton 2 in the British Museum. It is reviewed by W. BAUER in *GGA* 198 (1936), 24-30. The same subject is treated in C. H. DODD, *A New Gospel*, in *Bull. J. Ryl. Libr.* 20 (1936), 56-92: cf. *J. Theol. Studies* 36 (1935), 302-4. R. P. LAGRANGE, *Deux nouveaux textes relatifs à l'évangile*, appears in *Rev. bibl.* 44 (1935), 321-43; one of these texts is a fragment of the Diatessaron of Tatian, the other the 'new gospel' papyrus, which receives very full consideration.

C. H. ROBERTS, *An unpublished fragment of the Fourth Gospel in the John Rylands Library, Manchester*, is published in *Bull. J. Ryl. Libr.* 20 (1936), 45-56 with descriptive introduction *ib.* 1-9. The fragment gives the passage Joh. 8. 31-3, 37-8. It is reviewed by G. GHEDINI in *Aeg.* 15 (1935), 425-6, also separately printed, Manchester (1935), 34 pp., 1 pl.

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2. APOCRYPHAL, Gnostic, etc.

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3. LITURGICAL

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G. SOBHY, *Two leaves in the Coptic dialect of Middle Egypt (SF¹)* in *Mél. Maspero* (1934), 245-50, 1 pl., describes two leaves of paper with liturgical prayers in Fayyumic of the 15/16 cent. The author of the article does not say where they are at the present moment.

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4. LITERATURE

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of the interdependence of Greek and Coptic in Egypt. The same author's *Athenase, Ambroise, et Chenoute*, in *Muséon* 48 (1935), 55-75 gives a text from a Louvre fragment of which the main part was published in 1929. The author promises to undertake a corpus of the Coptic Athanasius 'débris coptes, souvent lacérés et presque toujours acéphales'.

G. H. MARSH, *The Use of Μυστήριον in the writings of Clement of Alexandria*, in *J. Theol. Stud.* 37 (1936), 64-80, makes special reference to Clement's sacramental doctrine.

5. HISTORY

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(b) Jurisprudence.

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(c) *Hagiography.*

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(d) *Monasticism.*

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W. HENGSTENBERG, *Bemerkungen zur Entwicklungsgeschichte des ägyptischen Mönchtums*, in the *Actes du iv^e congrès international des études byzantines*, appears in the *Bull. de l'Inst. archéologique bulgare* 9, Sofia (1935), 355-62.

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H. LECLERCQ, *Nonne*, ch. x. *Un couvent de nonnes à Bâouit*, in *Dict. d'hist. et de géogr. ecclési.*, Paris, 1935, 1607-15.

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6. NON-LITERARY TEXTS, ETC.

(a) *Non-literary Texts.*

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(b) *Catalogues and Collected Texts.*

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W. TILL, *Die orientalische Abteilung der Papyrussammlung der Nationalbibliothek in Wien*, in *Orientalia* 4 (1935), 380-90. This is a new name for the papyri hitherto known as the collection of the Erzherzog Rainer. T. enumerates the categories of papyri which compose this collection according to their various languages. The same writer's *Koptische Pergamente theologischen Inhalts . . .* (cf. *JEA* 21, 109, 111) is reviewed by J. SIMON in *Orientalia* 4 (1935), 502-5; by A. VAN LANTSCHOOT in *Rev. hist. eccl.* 31 (1935), 788-9; by CH. MARTIN in *Nouv. Rev. Théol.* 57 (1935), 531; by L. TH. LEFORT in *Muséon* 48 (1935), 236-7.

On Arabic material having reference to Christian Egypt we have G. GRAF, *Catalogue de manuscrits arabes chrétiens conservés au Caire*, Vatican City, 1934, xi+320 pp., which is reviewed by L. BROCKELMANN in *OLZ* 35 (1935), 523-4, and by A. VAN LANTSCHOOT in *Muséon* 48 (1935), 369-71.

A. VAN LANTSCHOOT, *Inventaire sommaire de MSS. arabes d'Égypte*, in *Muséon* 48 (1935), 297-310, describes manuscripts procured by L. Th. Lefort in 1923. Amongst these are: (1) history of the Babylonian captivity (Coptic portion at Vienna), (2) frag. of Acts of S. Thomas, (3) miracle of the B. Virgin at Atribe (frag. of Vatican arab. 170, 131), (4) encomium on St. Michael by Eustathius bishop of Thrake (salutation to St. Michael, ten miracles), (5) passion of St. George, (5*) (a) Sorrows of Mary by Cyriacus of Behnesa (20 pp.), (b) epistle of Pisentius of Keft, (6) frag. of Theodore of Ancyra on St. George and history of Archelides, (7) and (8) miracles of Apa Victor, (9) life and miracles of St. Marina of Antioch, (10) encomium on Severus of Antioch, (11) conversion of Matthew the Scribe, (12) martyrdom of George of Alexandria and life of Ephraem the Syrian, (13) life of Apa Hor, (14) history of Abu Fis, and (15) liturgical fragments. The paper manuscripts show traces of Coptic writing.

Of allied Ethiopic material we note S. EURINGER, *Verzeichnis der abessinischen Handschr. des Volksmuseums in Stuttgart*, in *Orientalia* 4 (1935), 465-83, which gives biblical, liturgical, and magical texts.

S. GRÉBAUT, *L'inventaire sommaire des manuscrits éthiopiens (ge'ez) de la mission Griaule*, published in *Aethiopica* (cf. *JEA* 20, 211) is continued in the same periodical, 2 (1934), 50-4, 65-9, 101-14, and in 3 (1935), 27-32, 82-4, 154-61.

7. PHILOLOGICAL

M. CHAÎNE, *Éléments de grammaire copte* (cf. *JEA* 20, 211) and *Les dialectes coptes assyoutiques A²* (cf. *JEA* 21, 113) are reviewed by CH. KUENTZ in *Bull. de la Soc. linguistique de Paris* 36 (1935), 161-5.

W. E. CRUM, *Coptic Dictionary*, Pt. IV (1935), *τακο-ϣωιτ*, vii, 405-572 is reviewed by L. TH. LEFORT in *Muséon* 48 (1935), 240, the reviewer expressing the hope that there will be an appendix of additions and corrections. It is also reviewed by S. GASELEE in *J. Theol. Stud.* 36 (1935), 220-1.

H. RANKE, *Die ägyptischen Personennamen . . .* (cf. *JEA* 20, 211) is reviewed by R. ANTHES in *OLZ* 35 (1935), 494-6.

V. STEGEMANN, *σϣωωρε ρϣτεϣωμ = stark*, in *ZÄS* 71 (1935), 81-5, traces the origin of this expression to Ps. 103. 20. It is briefly noted in *Anc. Egypt* (1935), 121.

W. TILL, *ⲙⲏⲧⲁⲕⲉϣ* in *ZÄS* 71 (1935), 87, also noticed in *Anc. Egypt* (1935), 122, deals with the reading of 2 Macc. 6. 4.

W. VYČÍHL, *Das ägyptische Vokalisationsproblem*, appears in *Mél. Maspero* (1934), 385-92. *Über ein ha-Präfix in Arabischen* in *WZKM* (1936), 109-10 and *Der Dialekt von Elephantine*, ib. 111-12.

W. H. WORRELL, *Coptic Sounds. I. The Main Currents of their History* . . . (cf. *JEA* 18, 186) is reviewed by W. F. ALBRIGHT in *Language* 10 (1934), 220-4 and the same author's *Coptic Sounds* (cf. *JEA* 20, 211) by M. COHEN in *Bull. de la Soc. linguistique de Paris* 36 (1935), 158-61, and by W. TILL in *WZKM* 42 (1935), 296-7.

8. EXPLORATION, ARCHAEOLOGY

(a) *Topography.*

L. BREHIER, *Blemmyes*, appears in *Dict. d'hist. et de géogr. ecclési.*, XLIV-L, Paris, 1935, 183-5. H. LECLEERCQ, *Oasis*: (i) les oasis d'Égypte, (ii) la grande oasis, (iii) el-Deir, (iv) el-Bagaouât, (v) Deir Moustapha Kachef, (vi) Gêbel el-Teir, and (vii) bibliographie, *ib.*, 1820-33.

A. CALDERINI, *Dizionario dei nomi geografici e topografici dell'Egitto greco-romana*, vol. I, I, A—'Αλικαρνασσέως, Cairo, 1935, xxi+216 pp., produced by the *Société Royale de géographie d'Égypte*, is planned as a vast repository, and from this preliminary specimen may be expected to be an extremely valuable work of reference. It is reviewed by W. L. WESTERMANN in *Am. Journ. Phil.* 57 (1936), 95-7.

S. HILLELSON, *Nuba (Nubia)*, appears in the now well-known *Encyclopaedia of Islam*, fasc. 51, 1935, 1015-22.

CH. MARTIN, *Les monastères du Wadi 'n-Natroun*, in *Nouv. Rev. Théol.* 47 (1935), 113-34, 238-52, is an excellent summary account of the monasteries described by H. E. White.

U. MONNETT DE VILLARD, *La Nubie médiévale* (Mission archéol. de Nubie, 1929-34): vol. I, *Inventario dei monumenti*, xl+290 pp.; vol. II, *Tavole*, i-c, Cairo, 1935, 100 pls. The same writer's *I vescovi giacobiti della Nubia*, in *Mém. Masp.* (1934), 57-66, is an attempt to identify the episcopal sees of Nubia cited by Wansleb in his *Hist. de l'Église alexandrine*, 20-30.

H. MUNIER, *Le monastère de Saint Abraham à Farshout*, in *Bull. Soc. Arch. d'Alex.* 30 (1935), 1-7, makes reference to a stele in the Graeco-Roman Museum at Alexandria. It is understood that Munier is preparing a work on the geography of Christian Egypt.

O. TOUSSOUN, *Notes sur le désert libyque: Coellia et ses couvents*, Alexandria, 1935, 36 pp., 10 pls. (*Mém. Soc. Roy. Arch. d'Alex.*, VII. I.) is an interesting effort to identify various monastic sites, Nitria, Scetis, Pernoudj, and Coellia, with special reference to the recently discovered remains at Coellia (Gebel Khaslim el-Cou'oud). *Le Rayon*, Cairo, 9 (1936) devotes its number for 1 May to Coptic Art. Amongst the articles we find, H. MUNIER, *Babylone d'Égypte*, 228-9; F. GÉRARD, *Au Musée copte du Vieux-Caire avec S. E. Morcos Simaika Pacha*, 230-3; E. DRIOTON, *L'art copte*, 234-6; E. MÉRIAL, *Les églises coptes du Vieux-Caire*, 237-9; E. LAUZIÈRE, *L'âme copte*, 241-5; A. CHAÎNE, *Le couvent de Saint-Antoine*, 246-9.

(b) *Arts, Crafts, &c.*

ANNA APOSTOLAKES, τὰ κοπτικά ὑφάσματα τοῦ ἐν Ἀθήναις Μουσείου τῶν κοσμητικῶν τεχνῶν, Athens, 1932, is reviewed by E. WEIGAND in *BZ* (1935), 141-44.

M. A. MURRAY, *Coptic Painted Pottery*, in *Anc. Egypt* (1935), 1-15, is an interesting and suggestive article on a subject which has as yet received inadequate attention.

H. PFISTER, *Teinture* . . . (cf. *JEA* 21, 113) is reviewed by W. F. VOLBACH in *Orientalia* 4 (1935), 506-8.

J. SAUER, *Koptische Kunst*, appears in the *Lexikon für Theologie und Kirche*, 6 (1934), 196-9.

W. F. VOLBACH, *Prima relazione sulla nuove stoffe del Museo Sacro Vaticano*, in *Rendic. Pont. Acc.* 10 (1935), 175-96, makes reference to some Coptic fabrics.

9. ADDENDA

E. LITTMANN contributes a biographical notice of *Ignazio Guidi* to the *ZDMG* 89 (1935), 119-30.

H. MUNIER, *Gaston Maspero et les études coptes*, appears in the new *Bull. de l'Assoc. des amis des églises et de l'art coptes*, 1, Cairo (1935), 27-36. 1 portrait.

Two reviews, *Aethiopica* and *Egyptian Religion* (cf. *JEA* 20, 207) founded in 1933 by the Alma Egan Hyatt Foundation, New York, ceased to appear at the end of 1935. The Foundation announces that it 'will devote further activities to Memoirs and occasional Papers'.

NOTES AND NEWS

THIS season will open a new chapter in the Society's field-work, with the decision of the Committee to send an expedition to Upper Nubia. The Sudan Government has granted concessions for two very promising sites about thirty miles apart, near the Third Cataract, namely Şulb ('Soleb') and Sesebi, both of which were fortress-cities enclosing temples. At Şulb (whence come the superb granite lions in the British Museum) is the most important monument in the Sudan, the temple of Amenophis III; its walls bear a unique series of reliefs depicting the *sed*-festival held in Amenophis' thirtieth year, and the pylons have reliefs of Akhenaten, illustrating several stages in the development of his doctrines. At Sesebi are the remains of a temple founded by Akhenaten, and called by him, like his foundation at Kawa, Gematen ('Aten is found'); it was later usurped by Sethōs I, who rededicated it to Amūn. Thus both sites—which include towns, and doubtless cemeteries also—offer a logical continuation and development of the Society's many years of work at Tell el-'Amarnah; and it is believed that much new information on the 'Amarnah Period' will be gained. Neither of these places has been excavated hitherto, and very little has been published about them. The first site to be examined is Sesebi, whither an expedition will shortly proceed, with Professor A. M. Blackman as Field Director, and Mr. H. W. Fairman as his principal assistant. Fuller details of the new work in the Sudan are given in the appeal for funds which has been distributed.

The investigation of the site of the Great Palace at Tell el-'Amarnah was nearly completed last season, and only a few more weeks' work are necessary before the remarkable ground-plan is recovered in its entirety. In order to accomplish this, and thus to round off an important phase in the Society's labours at Akhetaten, Mr. Pendlebury, accompanied by Mr. Lavers, will spend a short season at the site this winter.

We understand that Miss Calverley and Miss Broome will return to Abydos for a further season's work at the temple of Sethōs I.

At the Forty-ninth Ordinary General Meeting of our Society, held on 15 July, Mrs. Hopkin Morris was elected Honorary Secretary in succession to Professor Glanville, and Professor Hugh Last was re-elected Honorary Treasurer. The Entrance Fee to new Members was suspended until two hundred fresh elections shall have been made, and Members are urged to bring this opportunity to the notice of friends who might thereby be tempted to join the Society.

The Annual Exhibition of objects from the Society's excavations has been held in the rooms of the Palestine Exploration Fund, at 2 Hinde Street, Manchester Square, W. 1, from 14 September to 3 October.

We have much pleasure in announcing that the annual Bibliography of Ancient Egypt, which, formerly one of the most valuable features of this Journal, has ceased to appear for a number of years, is to be revived. Henceforward it will, like the Graeco-Roman Bibliography (Papyrology), be the work of a number of collaborators. These have already begun

the task which they have been so good as to undertake, and it is hoped that the first instalment of the new series, which will be under the supervision of Professor Blackman, will appear next summer. It will cover matter published during 1936, for unfortunately it is for more than one reason impossible to make up the ground lost since 1930. The labour of compilation is being immensely lightened by the use of the admirable bibliographical cards which are now distributed by the Fondation Reine Élisabeth, Brussels, and to which reference was made in the 'Notes and News' of our last issue.

M. Pierre Lacau, after a lengthy career in Egypt, retired at the end of March from the post of Director-General of the Antiquities Department of the Egyptian Government, and will, we understand, devote himself in his native country to the philological studies that he has so much at heart. No successor was appointed for some time, but it has recently been announced that Canon Étienne Drioton, of the Department of Egyptian Antiquities in the Musée du Louvre, and Professor Selim Hasan, of the Egyptian University, Cairo, have been nominated Director-General and Assistant Director-General respectively—the latter post being a new creation.

We have received the following note on the temple at 'Amāra from Mr. L. P. Kirwan:

In my preliminary report on the Oxford University Excavations in Nubia, 1934-5 (see *Journal* 21, 197-8) I remarked as follows:

'On the east bank of the Nile near 'Amāra, . . . we located with some difficulty the site of the Meroitic temple described by Budge (*A History of the Anglo-Egyptian Sudan*, 1, 467). When visited by the latter in 1906 both the gateway and six columns with sculptured reliefs were standing; to-day only one granite column-base and traces of mud-brick foundation walls are visible.'

I have since received a letter from Mr. Addison (late Conservator of Antiquities to the Sudan Government), who, while agreeing with me that Budge's statement certainly seems to suggest that the columns were still standing at the time of the latter's visit (in 1904-5, not 1906), is of opinion that the columns had been destroyed before that date. Mr. Addison, moreover, remembers having seen, in a publication by the late Professor Griffith, a statement which seemed to support this view. The statement in question occurs in *Meroitic Inscriptions* (II, 10 with note i) where Professor Griffith cites Mr. F. W. Green as having reported that, when he visited the site in 1911 or 1912, no trace of the columns was then visible. In addition, Professor Griffith appends a note from Mr. Crowfoot to the effect that the columns had disappeared before 1905. In a recent letter to Mr. Addison, which he kindly allows me to quote, Mr. Crowfoot confirms this note, adding, 'So far as I remember there was not even a tradition of the columns when I was there with Budge in the winter of 1904-5'. The late Professor Breasted too seems to have been under a misapprehension with regard to the then extant remains at 'Amāra, and in his *First Preliminary Report of the Egyptian Expedition* (in *AJSLL* 22, 102; Oct. 1906) he says, 'Owing to a misunderstanding of the local geography, we failed to visit and inspect the six columns still standing in the small late Nubian Temple on the east shore at 'Amāra'. However, there seems to be little doubt that the columns had disappeared before 1905. As to when they were removed there is some difference of opinion; Mr. Addison suggests the period of the Mahdiyya, while Mr. Crowfoot believes that they disappeared before that date on the *a priori* ground that there is more likelihood of building activity then than during the time of the Mahdiyya. In this connexion, however, it is worth noting that the photographs taken by Frith, who visited the site in January 1860, show the remains of five sculptured and inscribed columns, four of which appear to be preserved to about two-thirds of their height. Of the gateway there is no trace in any

of these views (see Frith, *Upper Egypt and Ethiopia*, Plate 32 with accompanying text; Frith, *Egypt, Nubia, and Ethiopia*, with descriptions and notes by J. Bonomi and Samuel Sharpe, London, 1862, Pls. xciv, xcv).

Three works from the *Nachlass* of the late Professor Griffith will appear in due course. The text-volume of the epoch-making *Catalogue of the Demotic Graffiti of the Dodecaschoenus* (of which the volume of plates was printed last year) will shortly be published by the Antiquities Department of the Egyptian Government in the *Temples immergés de la Nubie* series. It has been seen through the press by Mrs. Griffith, who has given infinite pains to this very exacting task. A volume is to be published by the Clarendon Press, entitled *The Adler Greek and Demotic Papyri*, dealing with a group of documents from Gebelên; the Greek documents are edited by Dr. Elkan N. Adler, the owner, and the demotic by Griffith. Finally, it has been arranged that Professor Glanville will complete and publish the edition of the early demotic papyri in the Louvre on which Griffith had spent much labour.

We bring to the notice of our readers a new series, *Aegyptologische Forschungen*, published by Messrs. Augustin under the general editorship of Professor Alexander Scharff, of Munich. This series, intended to include monographs too long for periodicals, will fulfil the same purpose as Sethe's *Untersuchungen*, which came to an end with the death of its founder and editor. Fascicle 2, *Die Konstruktion der ägyptischen Tür*, by Otto Koenigsberger, has already appeared, and will be reviewed later in these pages; Fascicle 1, on the late plastic art of Egypt, will follow shortly. Professor Scharff asks us to mention that he would specially welcome manuscripts from English colleagues; such contributions could of course be printed in English.

The first fascicle of references (Belegstellen) of the *Wörterbuch der ägyptischen Sprache* was warmly welcomed by all students of Egyptian philology on its appearance over a year ago, and succeeding parts are being awaited with impatience; for there is no greater desideratum in this field than that the *Wörterbuch* should be completed as soon as possible. In the present stage of our knowledge of Egyptian, a dictionary of that language without abundant references is of comparatively little value to any but the beginner.

Mr. J. G. Griffith, of the University of Wales, has received the degree of M.A. in Egyptian and Hebrew at the University of Liverpool. Miss Ina Rosental has taken a B.A. Honours (first class) in Archaeology (Egypt) in the University of London.

Professor Blackman is now Joint Editor, with Professor Droop, of the *Liverpool Annals of Archaeology and Anthropology*.



NOTICES OF RECENT PUBLICATIONS

Hieratic Papyri in the British Museum: Third Series; Chester Beatty Gift. Edited by ALAN H. GARDINER, D.Litt., F.B.A. London, British Museum, 1935. Two vols. Vol. I, text, 8vo., xiii+142 pp. Vol. II, folio, 72 pls. £4 15s.

Dr. A. H. Gardiner has made many important contributions to Egyptology, but next to his *Egyptian Grammar* these two volumes represent the most important of them all. Never before has so large a collection of Egyptian literary texts, not only for the most part new, but covering so wide a field, been placed at the disposal of students in one publication. Here let it be said that even a careful scrutiny of the photographic plates gives one no idea of the once extremely fragmentary condition of the manuscripts, or how long and laborious were the joint efforts of the editor himself and Dr. Hugo Ibscher to restore them to the condition in which they now appear. What Dr. Gardiner has to say on that subject in the preface, pp. vii ff., makes interesting and instructive reading for scholars who may one day be confronted with a similar task.

Very welcome is the admirable translation, with the accompanying commentary and philological notes, of the *Blinding of Truth*, pp. 2-6. With regard to the ending of the story, the reading suggested by Prof. Gunn seems more probable on the whole than Dr. Gardiner's, and Dr. Černý's further objection to Dr. Gardiner's reconstruction of the text, on the grounds of the usual form of Egyptian oaths, adds further probability to Prof. Gunn's proposal.

The *Dream-Book* may well be found to contain much matter that is of interest to students of folk-lore. Miss W. S. Blackman informs me that books concerned entirely with the interpretation of dreams are still in use among the modern Egyptian peasants. It would be interesting to see how far, if at all, the ancient and modern treatises resemble one another both in the subjects and interpretations of dreams. It is most regrettable that the characterization of the Sēth-like men (p. 20), which, as Dr. Gardiner remarks, is unique in Egyptian literature, should have been transmitted to us in so fragmentary a condition.

From the literary point of view the most important text in the whole collection occurs in those sections of *Papyrus No. IV*, vs. 2, 5 ff., which ascribe immortality to the writer through his books, asserting that they will perpetuate his name far better than tomb-chapel or memorial tablet, and that they will not only themselves take the place of children but will also secure him descendants in the persons of those who read his works. Remarkable as it may appear that such sentiments found expression as long ago as the end of the fifteenth or beginning of the fourteenth century B.C., yet it must be remembered that the lower Nile Valley was the home of the earliest literature of entertainment in the world, and that, until the dawn of Greek civilization, among no other people was literature or the man of letters held in such high esteem as among the Egyptians.

It is interesting to find that our old friend Khakheperresonb, whose somewhat commonplace lamentations Dr. Gardiner included in his *Admonitions of an Egyptian Sage*, is here eulogized along with the famous Imhotep, Ptahhotpe, and Akhtoy. With respect to the last-mentioned Dr. Gardiner has pointed out, p. 40, n. 1, that the name of the author of the *Satire on the Professions* is not Duauf, but Duauf's son Akhtoy, who is probably identical with the Akhtoy aforesaid.

Apart from other literary excerpts, hymns to divinities, magical texts (some containing interesting mythological allusions), medical prescriptions, magico-medical cures, fragmentary versions of the well-known *Hymn to the Nile*, the *Story of Isis and Rē*, and of the *Battle of Kadesh*, this publication contains a text of considerable liturgical interest, a version of the so-called *Ritual of Amenophis I* (pp. 79 ff.). With what Dr. Gardiner has to say (pp. 101 ff.) about the nature and use of this and the similar Cairo text I find myself fully in agreement; indeed, there seems to be no alternative explanation. It is to be hoped that a complete publication of the Turin version of this text will not be long delayed.

P. 30, n. 4. Egyptologists should in future remember that $\overline{\text{w}}$ must be rendered Apop, Apōp (the Coptic form), or Apopis (Gk. Ἀποπίς), and not Apōphis, a name belonging solely to the Hyksōs king.

Pap. No. IV, rt. 5, 8 (p. 30). 'Loving the silent man more than him who is loud of voice' reminds

one of the well-known passage in the *Wisdom of Anii* (Erman, *Egyptian Religion*, 236, ll. 20 ff.) and that in the prayer to Thôth (*Pap. Sallier I*, 8 = Erman, *op. cit.*, 306, ll. 7 ff.).

I now venture to make a few critical comments and to suggest certain modifications in the translation of various passages.

Pap. No. IV, vs. 5, 5 f. (p. 42). Does the 'mewing (lit. "weepings") of a cat' refer to the high-pitched chanting of the temple liturgy, or can it possibly be an expression for 'persistently'? I very tentatively suggest that $\text{𓆎} \text{𓆏}$ be emended to $\text{𓆎} \text{𓆏}$, and would then render: 'If thou make to flourish him that serveth God persistently (?) (and) if thou persevere in following his predilections, then thou shalt reach the haven in possession of His favour'.

Vs. 5, 7 f. Is not the meaning of $\text{𓆎} \text{𓆏} \text{𓆐} \text{𓆑} \text{𓆒} \text{𓆓} \text{𓆔} \text{𓆕} \text{𓆖} \text{𓆗} \text{𓆘} \text{𓆙} \text{𓆚}$ 'being shut up in the barracks which are made into (i.e. divided among) regiments with officers over them' rather than 'he is imprisoned in the barracks and put into a regiment with officers over it'?

Pap. No. V, rt. 6, 4 f. (p. 47). I would like to render $\text{𓆎} \text{𓆏} \text{𓆐} \text{𓆑} \text{𓆒} \text{𓆓} \text{𓆔} \text{𓆕} \text{𓆖} \text{𓆗} \text{𓆘} \text{𓆙} \text{𓆚}$ 'The sailor—so they say—the crocodiles are waiting (for him), the boat—its landing-stage (i.e. "the boat's landing-stage") being awash'. The words mean that the sailor runs serious risk of falling a prey to crocodiles while trying to embark on his boat when the landing-stage is under water. For 𓆎 'wait', see *Pap. d'Orb.*, 6, 9; *Pap. Chester Beatty No. I*, C. 3, 2; *Meir.*, iv, p. 43²; *Urkunden*, iv, 649, 12. *Dml* frequently seems to mean 'quay', 'landing-stage'; see e.g., *Peasant*, B¹, 130; B², 102-3 (a convincing example); Newberry, *El Bersheh*, i, 14, 9. This noun must be connected with the verb *dml* 'touch', and must mean the place where the water and land are in contact or where boats 'touch' the shore. $\text{𓆎} \text{𓆏} \text{𓆐} \text{𓆑} \text{𓆒} \text{𓆓} \text{𓆔} \text{𓆕} \text{𓆖} \text{𓆗} \text{𓆘} \text{𓆙} \text{𓆚}$ is a good instance of 'badal-apposition' (J. Spiegel, *ZAS* 71, 65, §§ 8 ff.).

Rt. 6, 14 (p. 48). *Kbw* 'wind' has hitherto, according to *Wb.*, only been found in Ptolemaic texts.

Vs. 1, 11 (p. 49 with n. 9). The word $\text{𓆎} \text{𓆏} \text{𓆐} \text{𓆑} \text{𓆒} \text{𓆓} \text{𓆔} \text{𓆕} \text{𓆖} \text{𓆗} \text{𓆘} \text{𓆙} \text{𓆚}$ *mgspw* 'crates' is perhaps connected with the Semitic root which appears in Arabic as فَنَس , a verb meaning to 'tie the legs' of a gazelle, 'put things together'. Hence فَنَس means 'lattice-work' and فَنَاص (pl. أَفْئَاص) a 'crate'. Here we have *gap* (= Arabic فَنَس , with metathesis of *s* and *p* [*p* = Arabic *f*] + the *mim*-prefix). An objection to this equation might be raised on the ground that the *š* of Canaanite names is represented in Late-Egn. not by 𓆎 but by 𓆏 (Erman, *Ägypt. Grammatik*⁴, § 114, Anm.); but see A. Ember, *Egypto-Semitic Studies*, 91 (d). For 𓆎 = Arabic ق see Ember, *op. cit.*, 106.

It would be interesting if *kafaš*, the ordinary word for the crate made of palm-sticks in modern Egypt, were related to the Late-Egn. word *mgps*, which denoted exactly the same kind of crate used in Egypt, not only from the Ramesside period onwards, but from time immemorial.

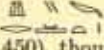

Pap. No. VII, rt. 3, 2 (pp. 57, 135). With $\text{𓆎} \text{𓆏} \text{𓆐} \text{𓆑} \text{𓆒} \text{𓆓} \text{𓆔} \text{𓆕} \text{𓆖} \text{𓆗} \text{𓆘} \text{𓆙} \text{𓆚}$, cf. Rochemonteix, *Temple d'Edfou*, i, 16 (9), where the words $\text{𓆎} \text{𓆏} \text{𓆐} \text{𓆑} \text{𓆒} \text{𓆓} \text{𓆔} \text{𓆕} \text{𓆖} \text{𓆗} \text{𓆘} \text{𓆙} \text{𓆚}$ 'The two falcons, the kites thy daughters, which are upon the wall of thy shrine',¹ are apparently a designation of the god Horus's collar-bones, or, perhaps, shoulder-blades.

Rt. 5, 4 f. (p. 59). Should not the passage be translated: 'If the poison mounts higher the Bark of Rēc will run aground on the spine of Apopis', rather than 'If the poison go up on high, the Bark of Rēc will founder, &c.'? For $\text{𓆎} \text{𓆏} \text{𓆐} \text{𓆑} \text{𓆒} \text{𓆓} \text{𓆔} \text{𓆕} \text{𓆖} \text{𓆗} \text{𓆘} \text{𓆙} \text{𓆚}$ = 'higher' see *Peasant*, B¹, 4. 'Run aground' not 'founder' is the meaning assigned to $\text{𓆎} \text{𓆏} \text{𓆐} \text{𓆑} \text{𓆒} \text{𓆓} \text{𓆔} \text{𓆕} \text{𓆖} \text{𓆗} \text{𓆘} \text{𓆙} \text{𓆚}$ by the *Wb.*, iv, 401, to which, as a matter of fact, Dr. Gardiner refers.

Rt. 5, 8 (p. 59). 'A man of good birth whose name is known' is probably a better rendering of $\text{𓆎} \text{𓆏} \text{𓆐} \text{𓆑} \text{𓆒} \text{𓆓} \text{𓆔} \text{𓆕} \text{𓆖} \text{𓆗} \text{𓆘} \text{𓆙} \text{𓆚}$ than 'the son of a man who knows his name'. With these words cf. *Pap. Leningrad* 1116 B, rt. 61-62, $\text{𓆎} \text{𓆏} \text{𓆐} \text{𓆑} \text{𓆒} \text{𓆓} \text{𓆔} \text{𓆕} \text{𓆖} \text{𓆗} \text{𓆘} \text{𓆙} \text{𓆚}$ 'A man of noble birth will make his name for ever and ever'. With $\text{𓆎} \text{𓆏} \text{𓆐} \text{𓆑} \text{𓆒} \text{𓆓} \text{𓆔} \text{𓆕} \text{𓆖} \text{𓆗} \text{𓆘} \text{𓆙} \text{𓆚}$ cf. the Arabic ابن ناس 'a man of good family', lit. 'a son of people'. See also *Wb.*, iii, 406 (v).

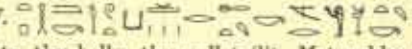
Rt. 6, 1 (p. 59). With this rubric cf. *Pap. Ebers*, 95, 9-11, where $\text{𓆎} \text{𓆏} \text{𓆐} \text{𓆑} \text{𓆒} \text{𓆓} \text{𓆔} \text{𓆕} \text{𓆖} \text{𓆗} \text{𓆘} \text{𓆙} \text{𓆚}$ (fibre? of the rush) also occurs. Is not 'fermented mash' (lit. 'mash of fermented matter') perhaps a better rendering of $\text{𓆎} \text{𓆏} \text{𓆐} \text{𓆑} \text{𓆒} \text{𓆓} \text{𓆔} \text{𓆕} \text{𓆖} \text{𓆗} \text{𓆘} \text{𓆙} \text{𓆚}$ than 'a fermented sop'? Does not $\text{𓆎} \text{𓆏} \text{𓆐} \text{𓆑} \text{𓆒} \text{𓆓} \text{𓆔} \text{𓆕} \text{𓆖} \text{𓆗} \text{𓆘} \text{𓆙} \text{𓆚}$ mean 'twisted leftwise' (cf. Sethe, *Erläuterungen zu den ägypt. Lesestücken*, 50, 19)? As the reference is to a scorpion's sting, 'puncture' would be a better rendering of $\text{𓆎} \text{𓆏} \text{𓆐} \text{𓆑} \text{𓆒} \text{𓆓} \text{𓆔} \text{𓆕} \text{𓆖} \text{𓆗} \text{𓆘} \text{𓆙} \text{𓆚}$ than 'wound'.

¹ Does 'shrine' here mean the part of the body enclosed within the ribs? Later on in the same text $\text{𓆎} \text{𓆏} \text{𓆐} \text{𓆑} \text{𓆒} \text{𓆓} \text{𓆔} \text{𓆕} \text{𓆖} \text{𓆗} \text{𓆘} \text{𓆙} \text{𓆚}$ means 'thine intestines'. As Fairman's recent collation and photographs show, 𓆎 , not 𓆏 , is the sign following 𓆎 .


Rt. 6, 3 (p. 59).  may here as elsewhere mean 'the patient', lit. 'he who is under (the surgeon's) knife' (see *Wb.*, v, 450), though in view of the spelling  = *dm*, vs. 6, 7, Dr. Gardiner's 'the man who has the wound' is possible; see also H. Grapow, *Untersuchungen über die altägyptischen medizinischen Papyri*, 105.


Rt. 6, 6. *Twbt n t n* it means 'the crumb' (as contrasted with the crust), rather than 'a pellet of barley-bread', for what is meant here is a bread poultice combined with onions and ochre. *Paš* should here be translated 'sting', for scorpions do not bite.

Rt. 8, 4. I suggest that the verb *cmk* means both to 'prod' or 'poke' someone and to 'poke' something into someone, meanings which admirably suit this passage and *Pap. No. VII*, vs. 1, 6. I would here render ... *Št nn cmk-t sw* by '... thy sting, thou shalt not prod with it', lit. 'thou shalt not poke it' (into any one), and in the latter passage *iwf hr cmk-s ml cmk* ... by '(and he [beheld Sēth] ... leaping her even as a ram leaps) and prodding her even as a ... prods'.





Vs. 3, 4. With 'Meret is against thee, lady of the throat' cf. . 'Thy cavity which transmits sustenance to thy belly, thy gullet (lit. *Mrt*-goddess) whereby thou livest', Rochemonteix, *Temple d'Edfou*, I, 16 (8). In Ptolemaic texts *Mrt* is a not uncommon designation of the gullet of a divinity; see also *Wb.*, II, 107. The passage in *Pap. No. VII* shows that the identification of the gullet with *Mrt*, which we find in Ptolemaic texts, originated in this goddess being made, in her capacity of a songstress, protectress of that particular part of the body. Analogous is the case of the four sons of Horus who, originally the protectors of the viscera, came to be regarded at an early date as embodiments of those organs.²


Vs. 6, 7 (p. 65). 'This spell is to be spoken four times when the puncture made by a scorpion has been opened' (i.e. cut to let the poison out) is possibly a more likely rendering of *qd-tw r pn sp 4 wp dm n qnryt* than 'This spell is to be spoken four times. Examine the wound made by a scorpion'.

Pap. No. VIII, rt. 9, 7 (p. 70). Perhaps 'There shall not enter any magic which sorcerers and sorceresses may work against thee' is preferable to 'There shall not enter against thee any magic performed by magicians male and female'.  is not an altogether impossible writing of the prospective relative form in a manuscript of the date of this papyrus.

Vs. 4, 1 ff. (pp. 72 ff.). With the mention of the boxes of acacia-wood containing parts of the body of Osiris cf. a relief in the temple of Denderah (Dümichen, *Geogr. Inschriften*, III, Pl. I) which depicts the king erecting two -pillars in the presence of Harsiese. Between the king and the god is a table on which are placed fourteen caskets, each containing a different relic. Above fourteen vertical lines of text, each naming the contents of one of the fourteen caskets, is written in a horizontal line: 'I have fared southward, I have entered the north, I have journeyed eastward and I have gone westward, searching for the members of my father Osiris'.

Vs. 4, 5, 10; 5, 8; 6, 7 (pp. 72 ff.). Gunn is probably correct in supposing that in these passages the Hapy of Osiris is a general term used in apposition to the names of the special organs immediately preceding. In the above-mentioned Denderah text, however, each of the four sons of Horus represents a separate organ assigned to its particular casket.

Vs. 4, 9 (p. 73). Should not  be restored between  and  as Dr. Gardiner himself restores  before *imy Hr-šr*? According to this text the 'heart, lung (*wf*)',³ spleen, *mn*, and Hapy of Osiris, yea the middle part of Osiris, were in the casket at Athribis. In the Denderah text referred to above we read: 'I have carried the god's heart from Athribis and taken it to Denderah' (*Tt-rr*).


Vs. 5, 7 f. (p. 73). *šš pn rwi n tpht* should probably be rendered 'this gullet leading from the cavity', not 'the windpipe departing from the cavern'. Since the passage in the Edfu text quoted above (Rochem., I, 16 [8]) associates *Mrt* with 'the cavity which conveys sustenance to the belly', and *Pap. No. VII*, vs. 3, 4, represents *Mrt* as protectress of the , the latter word may well mean 'gullet'. By *tpht* in both passages is probably meant the oral cavity.


¹ Dümichen, *Altägypt. Tempelinschriften*, Pl. XL; corrected from Fairman's photograph and collation.

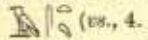












² See K. Sethe, *Zur Geschichte der Einbalsamierung bei den Ägyptern* in *SZBAW*, 1934, 13, 222 ff.

³ See Sethe, *op. cit.*, 235. Dr. Gardiner's 'liver' here is undoubtedly just a slip of the pen, for he translates the word 'lung' above, *Pap. No. VII*, vs. 4, 5.

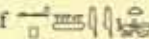
I do not understand how a 'sinew', that is, a tendon (a tough cord of inelastic white fibrous tissue uniting a muscle to some part and transmitting the force which the muscle exerts) could be drawn out of the brow or the vertex of a bird. The only similar things in about that position in a bird's head that I can think of are the muscles (musculus cucullaris) that move the erectile crests of certain birds, e.g. the Hoopoe. But it would be a clever Egyptian anatomist who could dissect out these muscles, and a gigantic bird in which they would be long enough to tie into seven knots. The Egyptians would never suspect the existence of such muscles, much less dissect them out.

I would make an alternative suggestion. The bird here translated 'phoenix' is clearly a Heron (*Ardea cinerea*, or some allied species). The bird has a long crest springing from the top of the head and directed backwards. The numerous Egyptian pictures of this bird represent this crest as two long filaments (which would account for the use of the dual ). The rather stiff and semi-flexible nature of the shafts of these crest-feathers may have led to the use of a word of 'leathery' significance (assuming that we have here the word *riid* 'thong') to describe them: and these, being several inches in length, might conceivably be tied into seven knots, I suppose the whole phrase to mean, not the ends of a sinew from a bird's brow, but the shafts of the crest of a heron. Or again, the bird may have been a wooden model, in which the shafts of the crest were made of gut; for a wooden falcon with two feathers on its head is used magically in exactly the same way in *Pap. Turin*, 131. 7.






(2).  (rt., 5. 7 and 6. 1). I think there can be little doubt that this is the 'pith of a rush', that is to say the spongy tissue that fills the shaft of a rush from which the outer rind has been stripped off, which is just what the old-fashioned rush-lights were made from. For a good description of the method of stripping and dipping rushes, see Gilbert White's *Selborne*, Letter XXVI to Barrington. The absorbent nature of *bkst* is indicated by its being dipped in wine-lees.



(3).  (vs., 4. 9; text, p. 64, n. 3). I think this must be the same word as *is* 'brain'. In *Urkunden*, IV, 84, line 8, it is written . But the position of the word in the list is rather against the meaning 'brain' (although in such lists the parts of the body are often misplaced or illogically arranged). It might equally well mean noto-chord, which connects with and is essentially similar to the brain. The word might be thought of by the Egyptians as the soft matter filling the skull, the spinal canal, and the larger bones. But if, as I presume, the editor here means noto-chord, then 'marrow' is a misnomer. In the sign-list of his *Grammar*, F. 37, 39, 40 are said to represent portions of the spine 'with marrow issuing', a somewhat misleading description. Marrow (medulla) is a highly complex and vascular connective tissue, not of course a free liquid lodged in the hollow of the bones. It would not, as marrow, flow out or 'issue' even from a newly-severed long-bone, although there would be a certain amount of ooze from the severed vessels and fat-cells. But in the case of the spine, 'marrow' is not the correct word. The spinal canal (i.e. the tunnel through the axis of the vertebral column), is occupied not by marrow but by the spinal chord, a continuous structure about 18 inches long (in man) extending from the foramen magnum of the skull, where it joins the brain, to the lower margin of the first lumbar vertebra. It is made up of a very complex series of nerve-fibres contained within membranes and surrounded by grey-matter like the brain. The appendage at the ends of the signs in question (, , ) must therefore be, not 'marrow issuing', but a loop of spinal chord. It is clear that in Egyptian there was also a specific term for spinal chord, , as may be seen from 'Harhotep', I. 172        'the spinal chord comes, which has come forth from the spinal column of Osiris'.

(4). *Vs.*, I. 5 ff. The method by which Seth took his pleasure of 'Anat is interesting, as it further illustrates his already well-known homosexual tendencies. Instead of the usual *nk* (elsewhere always used for human intercourse, even when one of the parties is an animal, e.g. Ch. Beatty III, 9, 16), the verb expressing the mounting or covering of animals is used here. But Seth, even if so mounted, did not practise his usual craft, since defecation resulted. On the other hand, if the goddess was in the water when Seth assaulted her, she would have been drowned if normal positions had been assumed.





In Ch. Beatty VIII, rt. 4. 6, I think the suggested corruption of  very probable. The restoration of the lacuna would then be 'a living beetle with its [wings tied] down' (cf. *JEJ* 20, 187, § 18). In line 6, I think, in the case of a fish, 'hatched' or 'spawned' would be better than 'born'.

In dealing with the short fragment No. XII the editor, in p. 122, n. 4 of the text volume, rejects my identification of *kns* with the pubes, hypogastric region (*ZAS* 62, 22). I doubt, however, the validity of his

objections. It is true that the magical papyri were probably employed for both male and female patients, and that a mechanical use of the masculine suffix *-f* appended to all organs of either sex is quite consistent with what we know of Egyptian carelessness in such matters. But it is a curious thing that with the possible exception of *kns* in the Vatican and Berlin lists, no female organs are mentioned in any of the twenty or so lists we possess. The Book of the Dead was used for men and women alike, yet in spell 42 we have only *hnn* 'phallus' and no female alternative; and the same applies to all the other lists known to me. In the Book of the Dead of Gesushen (Naville, *Papyrus Funéraires de la XXI^e Dyn.*, II, pl. xxxi, l. 2) we have the anomaly    . I think some additional weight is given to my original interpretation of *kns* by a passage in the Edwin Smith Pap. which has been misunderstood by Breasted, who has been misled into giving a forced meaning to the well-known word . I would translate the passage in question (20. 13-17) as follows:

'If you examine a woman who suffers in her stomach, and [sc. 'because'] no menses are coming to her, and if you find something in the upper part of the vagina (i.e. cervix uteri), you say concerning her: "It is a clot (lit. 'an obstruction of blood') in the womb". You prepare for her balsam $\frac{1}{16}$ *hekat*, grease $\frac{1}{8}$, sweet ale $\frac{1}{2}$ *hekat*, warmed and drunk for 4 days, besides preparing for her an emmenagogue oil, cumin, stibium, sweet frankincense. Mix and anoint the pubic region (emending  to ) therewith frequently.'

This is a perfectly normal case of dysmenorrhoea due to clotting. The symptoms are nausea and local pain. For the former an emetic is given, for the latter an ointment is rubbed on the lower part of the abdomen to relieve the pain in the vagina and to provoke the flow by massage. If *kns* is here understood in Dr. Gardiner's sense of 'vagina' it would stultify the prescription, for the introduction of an ointment *inside* the vagina would not relieve, but add to the obstruction.

In the same papyrus (Ch. Beatty XII. 6) the association of     'a female disease' with Seth, a male, is curiously reminiscent of 'a female disease' (*θηλεα νοσος*) inflicted on men in Herodotus I, 105.

Paleolithic Man and the Nile Valley in Upper and Middle Egypt; a Study of the Region during Pliocene and Pleistocene Times. By K. S. SANDFORD (University of Chicago Oriental Institute Publications, Vol. XVIII; Prehistoric Survey of Egypt and Western Asia, Vol. III); Chicago, 1924, xxi + 131 pp., 39 plates, map, 25 Figs. \$7.00.

Any adequate account of this important volume would require the conjoint efforts of a skilled geologist—nay, more, one experienced in the geology of Egypt—and a prehistorian. The present writer is so little of the former that he must needs confine himself to the latter role. For this there may be some excuse, since Dr. Sandford's book is avowedly written 'to examine Pliocene and Pleistocene strata in order to determine the age and order of the works of early Man in Upper and Middle Egypt, and to trace, as far as possible, their development and man's environment toward the point at which purely archaeological investigation can take up the story' (p. xvii).

Early, Middle, and Late Palaeolithic industries are discussed in relation to the discovery *in situ* of their typical lithic products, which (except for the Hilwān industry and Aterian points) are thus dated geologically. That is to say, the age criterion is not type but geological position. This is extremely important to the prehistorian, the more so as in every instance the conclusions of typology are borne out by the geological facts.

Dr. Sandford lays stress on the variety in form and probable multiplicity in origin of the products of the late Middle Palaeolithic, and on its transition to Late Palaeolithic, and he refers to a 'class of gradation' of which the earlier stages may be grouped together as late Mousterian and early Sebilian. To this group may presumably be assigned that interesting implement the tanged or shouldered point, commonly called Aterian. This is now generally considered not to be of local evolution but to indicate western cultural influence. Although the author has found a few of these points, some without desert patination, some in *waddy* wash, he has never found them *in situ* in Mousterian gravels, nor in the Mousterian-Sebilian silts or later Sebilian sites. It is suggested that their relative scarcity in the Nile Valley and their apparent absence from the stratigraphic series indicate a brief period of manufacture. In time, no doubt, they will be found *in situ*; meanwhile it is reported that they have been found in Khargah Oasis in stratigraphic position above 'Old Sebilian'.

In his expeditions Dr. Sandford has mapped geologically about 1,000 miles of the river valley, this volume being concerned with about 400 miles (both banks). His experience leads him to argue that it is now possible to form an opinion, based on geological evidence and not on guesswork or *expertise*, as to areas in which the explorer may expect to find remains of human occupation of post-palaeolithic and prehistoric periods below the still accumulating alluvium, and to define those in which it is hopeless to look for such remains.

The volume ends with a useful summary in terms of geology, climate, and lithic industries, finishing with the statement that the author can see no justification for defining the evolution of the valley in terms of 'pluvial' and 'inter-pluvial' periods, i.e. so far as the section treated in this volume is concerned. The factors giving form to the area have not in fact been in the main climatic, but more strictly geological, the nature of the strata being a specially important element. The plates, both of desert scenery and of implements, are a credit alike to photographer and to publisher.

C. G. SELIGMAN.

Alexander the Great and the Unity of Mankind. By W. W. TARN. (Proceedings of the British Academy, vol. XIX.) London: Milford, 1933. 46 pp. 2s. 6d.

In this essay, which is at once stimulating and convincing, Dr. Tarn sets out to discover the genesis of an idea, that of the Unity of Mankind; he finds it in the philosophy of Alexander himself. After a short survey of the tradition which attributes this revolutionary doctrine to Alexander (the evidence is in Arrian, Eratosthenes, and Plutarch), Dr. Tarn traces it down the 'line of kingship', through the Utopia of Iambulus and the Sibylline Oracles on Cleopatra, until finally it appears as an important ingredient in the ideology of the Roman Empire.

The essential characteristic of the theory in ancient times—that it was unity *imposed by a king*—is brought out in the clash between Stoicism and the Alexander-idea, the clash between theory and theory embodied in action. 'The philosophers have only *interpreted* the world; the point however is to change it.' To the Stoic, world-unity had always existed, the creation of the Divine Power; therefore, for the worldly king to attempt to impose it was, if not blasphemous, at any rate unnecessary. But when, in Marcus Aurelius, a Stoic found himself upon the imperial throne, he was forced to 'make terms with the national state'; and it was in fact the ideas of Alexander, not those of Zeno, that were constantly invoked to justify the Empire, whether in the *Concordia Augusta* or four centuries later in Claudian's eulogies upon a world in disruption.

In showing that it was in the critical mind of the Macedonian, reacting against the teachings of Aristotle, that these doctrines of the unity of the human race first arose, Dr. Tarn once more confirms the recent tendency to value Alexander as much for what he thought as for what he did; and this essay is of first-class importance to an understanding of Alexander's ideas.

F. W. WALBANK.

The Oriental Origin of Hellenistic Kingship. By CALVIN W. McEWAN. (The Oriental Institute of the University of Chicago: Studies in Ancient Oriental Civilization, No. 13.) Chicago, The University of Chicago Press, 1934. 8vo. xii+34 pp. 4s. 6d. net.

The author begins at the beginning, pointing out that there seem to be signs of social differentiation even in Palaeolithic burials. He also points to the very evident figures of medicine-men in the Palaeolithic paintings, and dwells on the gradual development of the two officials, priest and king. But it should be remarked that the origin of kingship is based not only on the priesthood of the holder, but also on his leadership in war.

The author then discusses the previous concepts of the origin of the Hellenistic theory of kingship, and rightly repudiates the old idea of classical scholarship that Greece was an oasis of civilization in a world of barbarism. He goes on to emphasize the self-evident fact that the Hellenization of the East is only one side of the picture. To a student of primitive man, or of the East, it is extraordinary that any one could be found to write, as so many have, that the doctrine of the deification of the king was an essentially Hellenic development. The idea was, of course, as much innate in the original inhabitants of Greece as in those of Near-Eastern, and of all other, lands.

The main part of the pamphlet is occupied with the easy task of showing that the kings of Egypt, Mesopotamia, Persia, and other countries were all divine, were addressed and treated as gods. This is done

with a wealth of detail and of references to a large literature, though, covering so vast an area, the author is naturally dependent mostly on secondary sources for his information. Curiously enough his section on Egypt is one of the shortest, though of course the fact that the Pharaoh was regularly called 'the Good God' and 'the Great God' is sufficient for his purpose.

The author very properly aligns himself with that scholar who approached his discussion of the kingship in Persia with the truism that 'Aeschylus and his audience knew, at least by hearsay, a great deal more about Persia and Persians than we are ever likely to know'. Starting from this point of view he has no difficulty in showing once again, and in full detail, how absurd is the explanation of a difficulty by the facile remark 'the ancients made a mistake'. One would have thought that to be self-evident, yet the habit is only too common still. Just before writing this the reviewer himself had received a long letter from an Egyptologist of repute, in which all difficulties resulting from his own misunderstanding of the evidence were disposed of by saying 'Herodotus had certainly never seen' the animal about which he was writing, and 'I do not attach any weight to' an awkward fact which vitiated his whole argument, &c., &c.

Satisfactory as is the author's outlook on his subject, yet even he is too much chained by the literary tradition and bias. For instance, he says that proskynesis was pre-Persian and quotes many examples of it, and gives no suggestion that Persia was different from other lands. Yet on the next page he says that 'The probable origin of Persian proskynesis was the homage offered to Cyrus at his triumphal entry into Babylon'. But surely it is more probable that a king of the ancient East, such as the Persian king, had received such worship from of old. The mention that the people of Babylon so treated him is probably merely the first reference to such behaviour before the Great King in the literature which happens to have come down to us.

G. A. WAINWRIGHT.

The Indus Civilisation. By E. MACKAY, F.S.A. London, Lovat Dickson & Thompson Ltd., 1935. 8vo. viii+202 pp., 16 pls., and sketch-map. 6s. net.

The author is one of the numerous band sent to archaeology by Clifton and its neighbourhood. Others have been Dr. Young, the pioneer in hieroglyphic decipherment, Miss Amelia B. Edwards, Prof. Sayce, Dr. Randall-MacIver, and the present reviewer. Dr. Mackay has had the widest experience of all Prof. Petrie's assistants, for having started in Egypt, he has also worked in Syria, in Mesopotamia, and finally in India, where he was in charge at Mohenjo-Daro for many years.

No one can ever know the material like the excavator, hence, as might be expected, this is a valuable little book, which will be welcome in the archaeological world. Here we obtain a detailed view of a civilization of which we have now all heard, but of which we have had only a hazy notion.

The discovery of the Indus civilization, like that of the Minoan, is one of the sensations of excavation, for each has proved to have been a brilliant phase complete in itself, yet utterly forgotten and unsuspected. In the case of Crete there was little enough legend concerning Minos to suggest the existence of a splendid civilization. But for the Indus there was nothing whatever, for it had perished about a thousand years before the period of the Vedas, the earliest time to which Indian legend looks back. Other civilizations, such as the Sumerian and Hittite, while completely unknown to us, had left plentiful evidence; in the language, in the one case, which had become a sacred, though dead, medium of religion, and in the other in references in the literatures of other countries and in the existence of certain monuments which clearly did not belong to any of the then known peoples. It is interesting that the existence of both the Indus and Minoan civilizations should have been betrayed by the appearance of seal-stones in the market. It is also interesting that here once again a riverine plain should have cradled a civilization, as in China, Mesopotamia, and Egypt.

Though utterly forgotten, the Indus civilization proves to have covered an area far larger than Egypt or Babylonia. In fact, it was probably an outlier of a great cultural province situated in Persia. If so, history will have been repeating itself from the beginning, for, so far as we know, civilization has always come to India from the north, whether with the Aryans and the Vedas, the Greek art via Gandhara, Islam with Mahmud of Ghazni, or the grace of medieval Persia with the Moghals.

Indeed, it clearly appears that the Indus civilization was an invader, for underneath it lie remains of quite a different type, to which the name Amri is given. The pottery of the Amri people differed from that of the inhabitants of Harappa and Mohenjo-Daro, not only in colours and designs, but even in shapes.

The inhabitants of Mohenjo-Daro were very mixed, the few skulls found belonging to four different types of mankind: Proto-Australoid, Mediterranean, Alpine, and Mongolian. The first two composed the majority of the population, and these skulls agree in many ways with those found in Babylonia. The Mongol race was represented by only a single skull, and it may be worth noting that figurines showing Mongol characteristics have come from only the lowest levels reached hitherto. The population being so very heterogeneous, it is not surprising to find that the trade of these cities was widespread. Goods were imported from Sumer or Elam, Central Asia, Afghanistan, Kashmir, the Nilgiri Hills, Mysore, South India, &c. Exports from the Indus Valley have been found in southern Baluchistan and Babylonia. The finds in Baluchistan consist at present of pottery of Indus manufacture, while in Babylonia have been turning up seals, etched carnelian beads, and 'pimpled' pottery, all of which are characteristic of India.

It is these latter finds which have given the dating to the Indus civilization. Wherever Indian things have been found *in situ* in Babylonia, it is always in strata dating to the Early Dynastic Period, c. 3000-2550 B.C. An interesting check on this is provided by the occurrence of reserved slip ware. It is found only in the lowest levels yet explored at Mohenjo-Daro, and in Babylonia such pottery precedes the Early Dynastic Period. Hence the upper layers at Mohenjo-Daro cannot be later than 2500 B.C., and it is supposed that the earliest layers hitherto reached run back for another three or five hundred years, and those that lie lower still would be of a yet earlier date. Thus the great wave of civilization which spread over the world between 3500 and 3000 B.C., included the Indus Valley in its sweep. The civilization, as we now have it, is thus contemporary with the Old Kingdom in Egypt. It came to a sudden end, apparently at the hands of invaders from Baluchistan. It thus fell before invaders from the north-west at the very time that Egypt suffered eclipse by invaders of northern affinities. The coincidence of the rise and fall of the two civilizations shows that the great area from Egypt in the west to at least the Indus in the east forms a single arena for the play of world-history. Since this time Mohenjo-Daro has been occupied only in the first and second centuries A.D., when the Buddhists built a *stupa* there.

Naturally the Indus connexions with Egypt are very slight, and it is perhaps surprising that they should exist at all. Such as they are, they are mostly of the Archaic and Old Kingdom ages, which is as we should expect. The Gilgamesh-figure overcoming wild animals reappears in Predynastic Egypt, and one of the bulls (Pl. x, 14) is drawn in the identical attitude of the bulls on several Archaic Egyptian palettes (Capart, *Primitive Art in Egypt*, figs. 181, 182, 184). Other remarkable similarities exist in the half-moon-shaped copper or gold terminals to the necklaces, and in the pottery candlesticks. Gold disk beads of a special manufacture, and imitation mussel-shells (the latter apparently for use as spoons), were also made in each country. The great gold ear-studs appear from the description to be exactly like those found in Egypt, though these are much later, being of New-Kingdom date. Moreover the inhabitants of these cities excelled in the glazing of faience, which is a specifically Egyptian art. They had, however, another use for glaze, in which they seem to have been almost unique at that time; this was the true glazing—not polishing—of pottery, which was done in the earlier ages of Mohenjo-Daro. They seem, however, to have used the glazing sparingly, and the insides of their water-jars were coated with a bituminous composition to make them watertight. The only other glazed pottery known at this early date is the handle of a jar from Kish in Babylonia.

Babylonia has often been mentioned, and it is extraordinary how numerous the connexions are between the two lands. Besides actual imports, there are the skeletal remains, the peculiar hairdressing, the shaving of the moustache, various art *motifs* such as the bull-man and Gilgamesh heroes, a curious plaited decoration representing matting, and the presence of a god wearing the horns so well known in Mesopotamia as a symbol of divinity.

Weights were commonly found, very well made and accurate. Some are very large, weighing as much as 25 lb. and more. False weights are very rare. The weights and measures belong to systems quite independent of those of either Babylonia or Egypt. The decimal system was already in use; it occurs even earlier in Elam and Babylonia. The pictographs bear a close resemblance to the script of the Proto-Elamites, the people who according to some authorities preceded the Sumerians in Mesopotamia.

The people seem to have been entirely practical and inartistic, concerning themselves with business. The streets passed between blank walls undecorated even with windows; the town did not grow up fortuitously, but was planned with care; and the sewage system was complete. The pottery was markedly utilitarian. There seem to be no traces of development. The antiquities were identical throughout a depth of 40 feet of mound, and even the script does not seem to have varied from beginning to end of the period. What little sculpture was produced is, perhaps naturally, rather better than the Sumerian, and, equally naturally, in no way approaches the beauty of the Egyptian.

The crops that have been identified hitherto are cotton, wheat, barley, melons, and dates. The grain was ground on the saddle-quern usual in the world of those days. Curiously enough there is no evidence yet for the use of donkeys or camels; the domesticated horse had, of course, not then made its appearance.

Many of the characteristics of historic and modern Indian life go back to this remote epoch. Some scholars believe that the pictographs provide the clue to the much-disputed origin of the Brāhmī script, from which so many of the modern Indian alphabets are derived. The mother-goddess of the modern Indian village is there, and the prototype of Shiva, Lord of Beasts, is common; the *pipal*-tree was sacred, and the peculiarly Indian worship of the *linga* was already established. The models of carts show them to have been of the same type as those in use to-day. The women wore nose-rings then as now, and the medical profession dealt in many of the same nostrums. But unlike the modern Hindus, the people were eaters of beef and other meat, game, and fish, and they worshipped the horned god, who is no longer present in historic India. There is no evidence for the serpent-worship which has become common in India to-day. The crudity of conception so evident in the Indian gods with many arms was already at work in the human figures with three faces, and the animal ones with three and even four heads of different species set on the one body. This clumsiness is entirely foreign to Egypt and even Babylonia.

Dr. Mackay is to be congratulated on having returned to India to continue his researches in so important a field of study, and one which he had the good fortune to enter practically at the beginning.

G. A. WAINWRIGHT.

Soknopaiou Nesos. Edited by A. E. R. BOAK. (University of Michigan Studies, Humanistic Series, vol. XXXIX.) Ann Arbor, University of Michigan Press, 1935. Pp. xii+47, 13 pls., 16 plans. \$2.50 net.

This volume presents the results of the work carried out by the University of Michigan Expedition at Soknopaiou Nesos (modern Dimē) in the season 1931-2, apart from the papyri etc. which await separate publication; any one who has seen the site will appreciate the exceptional difficulties which the Expedition had to face in organizing and maintaining a camp there, and will congratulate all concerned on the high standard of the work achieved. The editor points out that no complete scientific examination of the site was possible and that many problems remain unsolved; but it is unlikely that any one will follow in the Expedition's footsteps here, and we should do well to accept this as the only archaeological description of Soknopaiou Nesos that we are likely to get. The period to be investigated was more limited than at Karanis; for though Ptolemaic levels were reached here, there was no evidence of any occupation after the middle of the third century. It is, perhaps, a little dangerous to correlate the history of a small village with the major political events of the period, as the editor does on p. 20, especially when the evidence is relatively so scanty; but it is of interest to learn that the excavations have confirmed the early opinion that this site was one of the first, if not the first, of the villages on the desert fringe to be abandoned in the economic decline of Egypt in the third century A.D., which was probably aggravated in this case by the collapse of the irrigation system. As we might expect, no traces of Christianity were found in Soknopaiou Nesos, still dominated to-day by its temple's temenos walls; but it is perhaps worth noting, as a sidelight on the history of the village, that in Oldfather's list of 1923 this remote village is credited with several literary papyri, including the *Hector* of Astydamos and the *Apology* of Plato—a surprising tribute to the extent of Greek culture. We may hope that the papyri found in the course of the excavations will add to the number of literary texts, and also throw some light on the history of the town's later days.

The first and the longest chapter, on Topography and Architecture, contains a description by the editor and Mr. E. E. Peterson, the Field Director, of the two separate areas selected for excavation, and is accompanied by admirable photographs and plans such as are to be found in the Karanis volumes; here attention may be drawn to the wall-paintings of the Roman period in House II 204, religious in character and more Egyptian than Greek in style, and to the description of House II 201. This peculiar building is distinguished by its unusual size and construction, and by the use of wood—a commodity that can have been none too common at Soknopaiou Nesos—for purposes of decoration both within and without. The writers point out that it cannot have been a private house, and suggest, but without conviction, that it *might* have served some religious purpose; but do not the exceptionally deep vaults and the secret chambers point to its having been a bank?¹ In Chapter II Prof. Boak publishes a small collection of 15 customs receipts for the payment either of the 3 per cent. tax or of the *λμῖνος Μέρμερος* (*n.b.* in this connexion the description of the substantial barriers built at the ends of streets to prevent egress except through the gates), and

¹ For a bank in the village of Dionysias, see Wessely, *Karanis und Soknopaiou Nesos*, 47.

gives an interesting account of the seals attached to some of them. The two inscriptions found on the site are published by Prof. Boak in Chapter III; one is too fragmentary to be of any interest, the other records the dedication of a road (perhaps the sacred road that ran from the south gate to the temple) to the god Soknopaios. Chapter IV is devoted to a description, by Mr. R. A. Haatvedt, of the coins found on the site. A few slips or misprints may be noticed: on p. vi, for W. P. Grenfell read B. P. Grenfell; on p. 26, top line, for $\epsilon\theta'$ read $\epsilon\phi'$; on p. 31, no. 11, l. 4, for $\epsilon\iota$ read $\epsilon\iota$. The volume is a worthy member of the series in which it appears, and, it is to be hoped, will soon be followed by the publication of other archaeological material from Soknopaiou Nesos or Karanis.

C. H. ROBERTS.

An Economic Survey of Ancient Rome. Volume II: Roman Egypt to the reign of Diocletian. By ALLAN CHESTER JOHNSON. Baltimore, The Johns Hopkins Press; London, Humphrey Milford; 1936. 8vo. x+732 pp. 18s. net.

For the purposes of the student of economics, this book contains a most useful collection of material: the documents, 445 in number, which are given in translation, are judiciously selected, and the introductory sections to the chapters not only summarize the evidence they give, but in several cases add lists or tables with references to all published sources of information. Taken as a provisional statement of what has been discovered, which is what the author claims it to be, it may be fairly described as comprehensive and up to date; and the general criticisms which follow are not intended to reflect on the merits of the work, but to offer some cautions for the guidance of students who have not the opportunity of making a first-hand acquaintance with the texts.

The evidence provided by the papyri of the Graeco-Roman period in Egypt, extensive as it seems to be, is still very scrappy and obscure: in regard to taxes, for instance, we have only a few thousand receipts out of the millions which must have been issued, and these seldom say more than that a certain individual paid a certain sum for a certain tax at a certain place on a certain date: when several receipts for the same tax come from the same place it may be possible to infer the rate at which the tax was assessed, but it is quite clear that these rates varied at different places, and there is no clue yet found to the reason for the variation: this is confirmed by such official documents as the rules for assessment on garden-land in the Arsinoite nome (no. 320), which do not fit in with the receipts from other districts.

Another difficulty in arriving at any precise conclusion as to the economic conditions in Egypt lies in the uncertainty of the weights and measures. After a thousand years of state regulation, we have attained to something like uniformity of weights in commercial dealings here; but in Egypt standardized weights do not appear to have been commonly used, and a man who wanted to make sure of the exact amount, say of corn, that he was to get had to specify the particular vessel in which it was to be measured. Occasional comparisons of different local measures show that they varied widely—the artaba, for example, had a range of nearly forty per cent.: and the actual weights which have been preserved are quite as irregular.

It must also be remembered that a great deal of the evidence on economic conditions provided by the papyri and inscriptions is open to suspicion as biased; the need for discretion is obvious when we are dealing with the petitions and complaints which occur in large numbers, but official documents are not always trustworthy. For instance, the well-known rescript of Tiberius Julius Alexander is often quoted as proof of the misgovernment of Egypt under Nero and the reform under Galba: but the date of its issue, when news of the death of Nero could only have reached Alexandria by exceptionally speedy transmission—presumably arranged privately rather than officially—and certainly no communication could have been received from Galba, makes it probable that the rescript was really a manifesto of the anti-Neronian party at Alexandria, headed by the prefect, which was designed to paint the administration of Nero as black as possible and to hold out bright hopes for the future; and its value as economic evidence is about that of a modern election address.

The comparison of prices and values in Egypt with those elsewhere in the Roman Empire is complicated by the exceptional nature of the provincial currency. The dual system of the Ptolemies, with statements $\acute{\alpha}\rho\gamma\gamma\upsilon\lambda\iota\alpha\nu$ and $\chi\alpha\lambda\kappa\omicron\upsilon$ —which mean 'on the silver standard' and 'on the copper standard' respectively, not 'in silver' and 'in copper'—was abolished under Augustus, though the terms lingered on for many years: even in the third century A.D. references are found to payments in 'Ptolemaic' coin, which are as anachronistic as the references to payments in marks or nobles that occur in England in the seventeenth century. Down to the time of Diocletian the currency of Egypt was purely a token one, and so far as internal

prices were concerned the depreciation in its metal content probably had no more effect than the recent depreciation in the metal content of English silver has had in English prices; nor would the external exchange be affected, as there is no evidence that Alexandrian coin was ever shipped abroad as Ptolemaic copper had been. Price-levels in Egypt have to be considered as a thing apart.

The fundamental difficulty, however, lies in the fact that a great part of the taxation of Egypt was collected in kind and transmitted in the same form to Rome, where it was not marketed, but distributed as a dole; and so there was no need for its money-value to be determined at any point in the transaction. Statements of the revenue derived by Rome from Egypt expressed in terms of denarii or drachmas can be little more than guesses, and, whether based on corn-prices at Rome or at Alexandria, do not give any guide to the economic situation in Egypt. The only thing that can be said is that the Roman administration of Egypt paid no attention to economics. A fixed quantity of corn had to be provided by a district; the shares due from the cultivators were assessed on them; and if, as constantly happened, a man found himself unable to pay his share and fled from his land, his neighbours were expected to take over the abandoned holding and produce the requisite corn. The productivity of a great deal of the land in Egypt was directly dependent on manual labour, and the Egyptian peasant was not in a position to secure additional hands: if he found himself saddled with some more acreage, he could probably expend no more labour than he had done before, and the average return per acre of his holding would be diminished. The natural result was that the position of the man on the soil went from bad to worse, and by the time of Diocletian it was practically hopeless.

J. G. MILNE.

The following works have also been received:

The American Schools of Oriental Research: Catalogue 1935-6. New Haven, Conn., 1935. 20 pp.

Cleopatra's Daughter: The Queen of Mauretania. By BEATRICE CHANLER. London, 1936. 365 pp., 14 pls.

Excavations at Tepe Gawra. Vol. I. By E. A. SPEISER. University of Pennsylvania Press, 1935. 220 pp., 86 pls.

Le Fonctionnement grammatical de l'expression pri hrw en ancien égyptien. By J. J. CLÈRE. (Mélanges Maspero, vol. I.) Cairo, 1935. 45 pp., 1 pl.

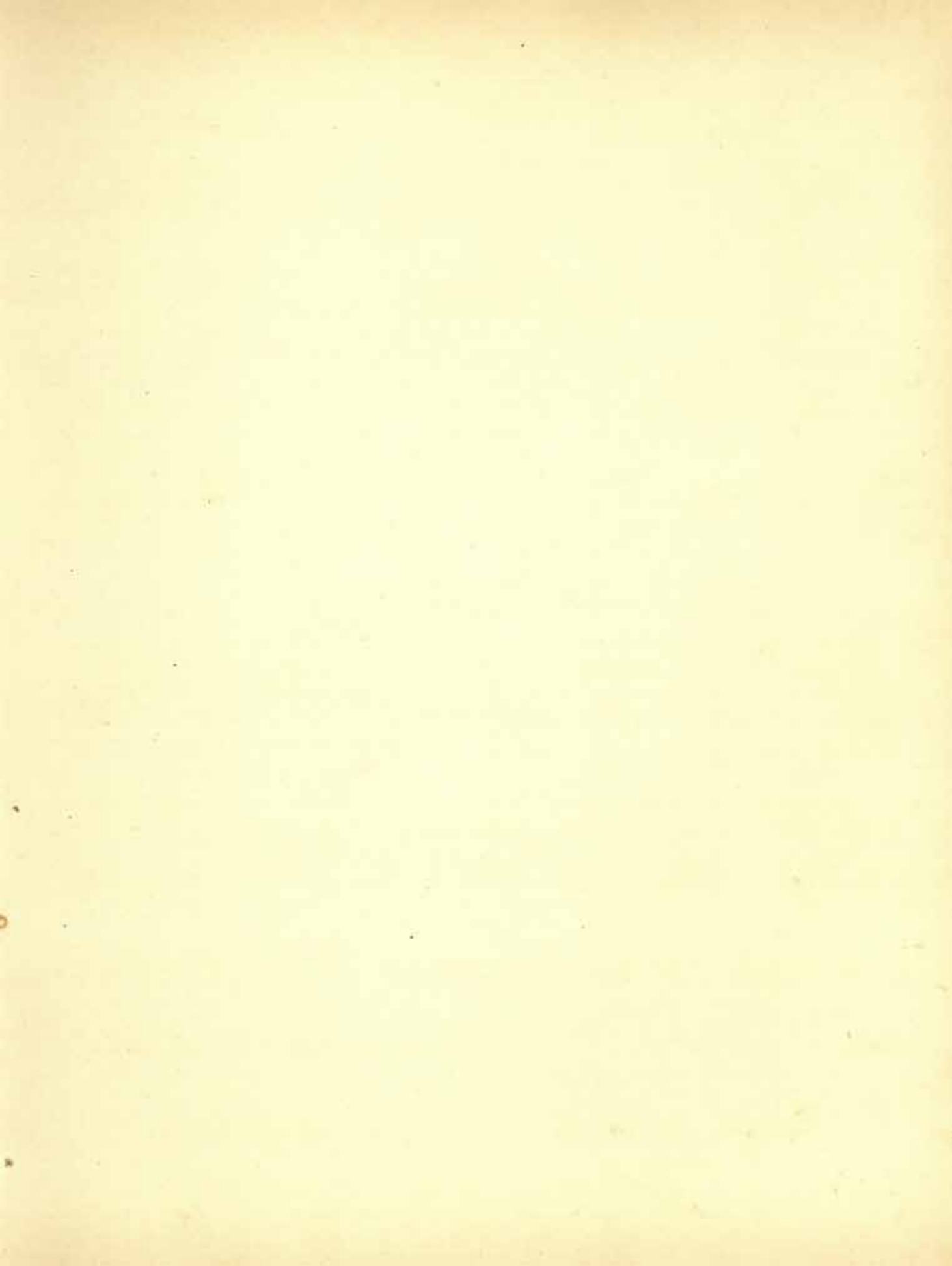
Iraq, vol. 2, part 2. Oct. 1935.

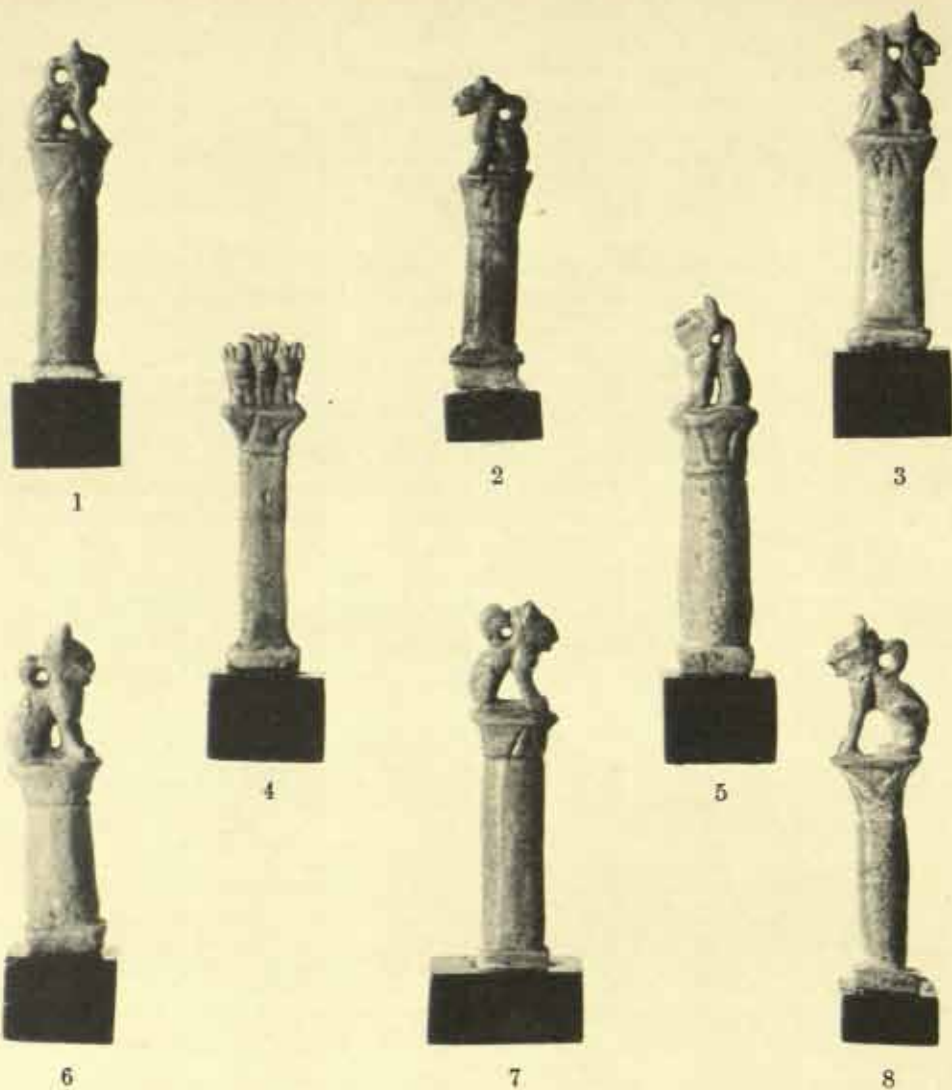
The Megiddo Water System. By ROBERT S. LAMON. (Univ. of Chicago Oriental Institute Publications, vol. XXXII.) 1935. 42 pp., 8 pls.

Prehistoric Assyria: The Excavations at Tell Arpachiyah, 1933. By M. E. L. MALLOWAN and J. CRUIKSHANK ROSE. (Reprinted from *Iraq*, 2, part 1.) Oxford, 1935.

Sahara: The great Desert. By E. R. GAUTIER. Translated by DOROTHY F. MAYHEW. Columbia Univ. Press, 1935. 264 pp., illus.

Les textiles de Palmyre. By R. PFISTER. (Les éditions d'Art et d'Histoire.) Paris, 1934. 76 pp., 13 pls.





SMALL EGYPTIAN FIGURES OF CATS

Scales: 1-8, 1:1; 9-11, 7:8

NOTES ON SOME SMALL EGYPTIAN FIGURES OF CATS

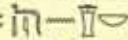
By NEVILLE LANGTON

With Plates v-vii

THE following notes relate to a collection which my wife and I began to form twenty-five years ago, with a view to adding something to the history of the cat in Egypt and the cult of the cat-goddess Bastet. If our hopes have not been realized, our efforts, though confined within the limits of a student's collection, have resulted in the acquisition of a number of rare and interesting pieces. There is risk in deferring publication indefinitely—even with the hope of fuller knowledge—so a first selection of them is shown and discussed here. I am anxious, however, that they should be regarded as introduced rather than explained; for although I have ventured on some suggestions, I realize how readily these may be upset by specimens unknown to us, and that some of the ideas put forward may be considered as alien to ancient Egyptian mentality by those better qualified to judge than myself. Several important points are touched on without any attempt at elucidation: the widespread popularity of Bastet, both as a cat-headed woman and wholly as a cat; the shadowy figure of Rē as 'the male cat'; the puzzle of the lioness-headed goddesses, and above all the new ideas which, following the Libyan usurpers of the Twenty-second Dynasty, show a break with tradition and a freshness and homeliness suggesting that this period is more interesting than has generally been imagined.

Except where otherwise stated, all the pieces illustrated and described are in our collection.

1. FELIS STYLITES

The amulets that form the group shown here are of considerable interest, although I cannot find that they have ever been discussed. Each one consists of a pendant in the form of a pillar surmounted by one or more seated cats. All have rings for suspension, and were probably attached to necklaces. Despite differences in style and quality, these objects, all of which are of faience, have a strong family likeness which suggests that they belong to the same period; and this, to judge from the glaze, will be the Twenty-second Dynasty. If this dating is correct, these pieces must be added to the numerous novelties in religious ideas that appear in that interesting period. That they are connected with the goddess Bastet is suggested by the presence of the cats, and is put beyond doubt by a defective example (not shown) which, in addition to the feet of the missing cat, bears the inscription (←):  'Utterance by Bastet, Lady of Bubastis', and by two similar pieces which are figured by Petrie in his *Amulets* (226 a, c), and which bear almost the same inscription.

There appear to be four varieties of these cat-on-column amulets, as follows:

1. A single seated cat (Pl. v, nos. 1, 2, 5-8).
2. Two seated cats side by side, and facing the same direction (not illustrated).
3. As 2, but facing in opposite directions (Pl. v, 3).
4. As 2, but with three cats (Pl. v, 4).

I can suggest no reason for these differences.

The form of the capitals of the columns suggests that the lotus rather than the papyrus is intended. An interesting point is the variety found in the forms of the shafts, which in section are round, square, oblong, hexagonal, heptagonal, and octagonal; all of these except the oblong are architectural types found in Egypt. All amulets of this type that I have seen terminate at the bottom in square bases, except one admirable little specimen in the Ashmolean Museum which stands on a double circular base.


This combination of cats and columns is very intriguing. That cats love to sit on posts and stumps is well known to all cat owners; but these pieces will be something more than illustrations of a natural habit. Being amulets, they have a religious or magical origin and significance, but while the cats are associated with Bastet, the columns introduce an uncertain element.

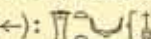
The column or pole in various forms is connected with various deities—with Osiris, with Min, and possibly with Hathor. Two bronzes in our collection show cats with Osiris, but the Osirian column is unlike these cat-topped pieces. Links with Min are lacking, but they are frequent between Hathor and Bastet, and Bastet as cat is a constant addition to the Hathor-headed sistra with column-shaped handles. At present, however, the column remains an unexplained feature.

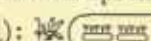


Apart from these amulets I know of only two cat-and-column figures. One, in the Louvre, is a bronze column, square in section and about 25 cm. high, surmounted by a sitting cat. The other is a gold 'charm-case'—a cat's head on a column—from Tharros in Sardinia, of the seventh or sixth century B.C. Once in the Webb Collection, it is now in the Victoria and Albert Museum.

2. INSCRIBED CATS

There does not appear to be any published collection of inscriptions on cat-figures. Should one be formed in the future the three examples given here may be worthy of inclusion. I leave aside the inscriptions on the bases of cat-backed scaraboids, which include such names as Amen-Rē, Amūn the Lord, and the inevitable Tuthmosis III, and am concerned only with those on free-sitting or couchant figures.

A. A finely modelled sitting cat on a base, the front and right-hand vertical sides of which are inscribed (←): . 'May Bastet the great, Lady of Bubastis, cause Haremhab . . . to live . . .'. The piece is in bronze, 4.7 cm. high (Pl. v, 9). The inscription is of a type common on bronze figurines.

B. A spirited figure of a couchant cat on a base, the front and right-hand vertical sides of which are inscribed (←): . 'May Bastet give (lit. open) a Happy (New) Year to Pedubaste'. The figurine is in pale green faience of fine quality, is 6.4 cm. high, and belongs to the Saite Period. Ears and back have been partly restored. This fine piece may have been either a votive offering to some shrine for a year's benefits for Pedubaste, or a kind of durable New Year's card from some well-wisher. It is perhaps mere chance that the name of the goddess invoked also forms part of the very common name of the beneficiary (Pl. v, 10).

C. This small seated cat is specially interesting as bearing (on the under surface of the base) a royal name (←↓): . 'King of Upper and Lower Egypt, Sheshonk'. It is probable that this is Sheshonk II and that the piece is thus of the Twenty-second Dynasty. The writing with  instead of  should be noted as a rare variant (cf. Gauthier, *Livre des Rois*, III, p. 308, n. 4 of p. 307; pp. 318, 364), and the inversion of the last two signs is not without parallel (cf. *op. cit.*, 316, 363, 364, 374). The glaze, partly perished, is duck's-egg

green and of very fine quality; the workmanship is also unusually good. It is 4.3 cm. high, and with the exception of the superb bronze cat of Wahibrê in the Louvre is the only 'royal' cat that I have seen (Pl. v, 11).

3. A RITUAL GROUP

The Bubastite Period has given us many interesting small antiquities, and the faience piece figured on Pl. vi, 1 certainly challenges the imagination. It shows a cynocephalous ape holding a disk over the head of a cat seated between its knees; the whole group stands on the capital of a papyrus-column which is now lost. The glaze is light blue, and rather coarse in texture; the body of the ape is dotted with brown spots. The height is 8.3 cm. The group is so unexpected that one's first thought is of caricature, but this is not the final impression, and the existence of other groups on somewhat similar lines forbids us to see in this one an addition to the manifestations of Egyptian humour. It is homely, like our old Staffordshire pottery figures. I suggest, diffidently, that it represents some ritual practice in which the Ape of Thoth, or perhaps a priest masked to impersonate it, places the solar disk on the head of Bastet's cat or of herself, or perhaps even on the head of the god Rê disguised as the 'male cat' mentioned in Spell 17 of the Book of the Dead. The ape is well known as the herald of the rising sun, and unless this last interpretation be overruled as involving symbolism that is too elaborate or foreign to Egyptian thought it seems a possible solution. A cat in gold with disk, a delightful little piece assigned to the Roman Period, is in the Cairo Museum (no. 4132), and may represent the cat wearing the disk set on its head by the ape. This may be represented also by the small faience amuletic figure shown in Pl. vi, 2; in it a uraeus has been added to the disk and a kitten sits snugly between the forelegs. This little piece, so far as I know unique, is 3.7 cm. high, and of a fine blue glaze which points to the Twenty-second Dynasty. The uraeus alone is found on the head of a seated bronze cat in the British Museum. The kitten is, one must admit, an intrusive element, and forms an exception to the rule that in 'family' pieces (see Section 7 below) the cat, save for a collar and pendant (usually the sacred eye) goes unadorned, and that the head-ornaments and ear-rings and nose-rings were reserved for the divine as opposed to what I had almost called the human side. More examples are needed for study, however, before there can be hope of confirmation of this. It would be interesting to follow up these curious ape-pieces; to collect them might throw some light on the ideas of the Bubastite Period, to which they seem to belong. There were a number of these homely groups in the MacGregor Collection which suggest ritual practices connected with the god Bes, between whom and Bastet there are numerous links. Another point of interest is that most of them, similarly to the piece discussed above, are supported on the capitals of papyrus columns which are probably handles. Apart from the ape groups there are a number of these handled pieces in faience and bronze, depicting a great variety of subjects among which cats are included.

4. A CAT-OFFERER

The later ages of Egyptian art have left us a number of statues and statuettes of persons offering, or at least holding, small shrines and figures of deities, and the little group in faience shown on Pl. vi, 3 seems to fall into the same category. It represents a male figure on a solid, low-backed seat, and holding on his knees what is probably the image of a sitting cat rather than the living animal. His head is hairless save for a heavy lock falling on each side over the ears and banded level with the mouth. The locks of hair, eyebrows, armlets, bracelets, and anklets are black. There is a ring at the back for suspension. The height is 4.7 cm.,

and the style and bright blue colour point to the Bubastite Period. The piece was in the MacGregor Collection, and probably came from the excavations at Bubastis.

I previously regarded this as a *genre* group of a man of non-Egyptian type nursing a cat, and classed it with the similarly barbered figure (Hilton Price Catalogue 3126) playing on the double pipe, and other pieces, but the sight of a small piece in the Cairo Museum¹—a lioness-headed goddess, disk-crowned, with a sitting cat on her lap—probably Bastet, since figures of Nehebkaw support the throne, caused me to examine our piece more closely and to revise my opinion. The position of the hands, low down and far from the cat, had always been a difficulty; but this disappeared if the cat was regarded not as a living pet but as the image of a cat on a stand, and the straight edge across the knees as that of the base and not that of a tight-drawn kilt. The fact that the pipe-player mentioned above is recorded as nude is some support for eliminating the kilt here; compare also the dainty little wooden figures in the British Museum of girls carrying cats, described by the late Sir Ernest Budge as 'temple maidens'.² The attitude thus becomes one of presentation, and the cat figure probably a sacred image, so that we have perhaps a man, either lay or priestly, offering a cult-image of Bastet in her form as a cat. It is possible that at the great temple of Bubastis, and at other important shrines, there were stalls for the sale of *objets de piété*, where visitors could buy replicas of sacred objects for home worship or decoration, and that this is one of such pieces.

5. A CAT SEATED ON PRONE ENEMIES

The remarkable fragment shown on Pl. vi, 4 is in faience with a rather coarse light-blue glaze, is 3.7 cm. long, and appears also to be of the Twenty-second Dynasty. It represents the feet of a standing figure, with the left foot forward, trampling on the backs of two prone enemies of negroid type. The head of the prone figure on the right is shown full-face, but that of his fellow turns sideways under the pressure of the left foot. Sitting on the feet of this twisted enemy, and behind the advanced foot, is a cat which, looking over its right shoulder, turns its back on the scene. The length of the foot suggests a height of about 15 cm. for the lost figure.

In addition to the curious feature of the twisted head of the enemy, the fragment offers two problems: the nature of the lost figure and the strange attitude of the cat. The *motif* of enemies trampled under foot is almost as old as Egyptian art, and the figure was probably one of the lion-headed deities, judging by complete examples of the enemy-trampling series. The cat, I think, rules out a suggestion that a king was represented, for although kings and lions and prisoners are depicted together, kings and cats are an unknown combination. Of the various lion- or lioness-headed deities I think that Bastet is the most likely and the best supported by evidence, despite the more militant nature of Sakhmet. A step-shaped pedestal in green faience from Bubastis, with the feet of a lost figure trampling on two negro prisoners and inscribed 'May Bastet give life and power' is mentioned in the Hilton Price Catalogue (no. 3195), and gives a valuable clue. There is further the evidence of a piece in the Bethell sale (lot 213), in which a lion-headed figure, enthroned, treads on prone enemies; as the open-work sides of the throne have figures of Bes as supporters, Bastet is, I think, clearly indicated, for she and Bes are constantly found together, whereas Bes and Sakhmet are not.

While cats are occasionally found at the feet of certain deities, their position elsewhere is facing forward and in front of the right foot (probably because that foot is to the rear and

¹ Daressy, *Statues de Divinités* (Cat. Gén.), no. 39122, Pl. liii.

² Brit. Mus. Nos. 32732, 32733. Cf. Budge, *The Mummy* (2nd ed.), Pl. xiii; *JEA* 15, 236 with Pl. xxxix.



1



2



3



4



5



6

SMALL EGYPTIAN FIGURES OF CATS

Scales: 1-3, 6:7; 4, 1:1; 5, 6, 8:9

thus allows adequate space for the cat). Here the attitude is novel and baffling. The animal shares the position of triumph, yet withdraws from an active share in events. I know no piece like it. Its uniqueness adds to the danger of speculation, and I feel that it is best set aside for the time being, especially as the presence and attitudes of normal cats remain unexplained in so many cases. No doubt these mostly indicate the presence of Bastet in cat-headed or in fully animal form, but there is also the possibility that the statement in Spell 17 of the Book of the Dead, that 'the male cat is Rē himself'¹ must be taken into account.

6. CATS WITH NOSE-RINGS

In 1924 a native dealer brought me the sitting bronze cat shown in Pl. vi, 5. It is 5.9 cm. high, and is far from conforming to the usual excellent modelling of ancient Egyptian cats, with its crudity and laboured though conscientious detail. It is, however, in its ornaments that the chief interest lies. These consist of an engraved collar of three rows, a scarab in relief on the head, gold ear-rings, and, most surprisingly, the remains of a gold nose-ring firmly embedded in the hole provided for the purpose. The gold earrings are perhaps refills, but of the antiquity of the nose-ring there can be no doubt.

It is a curious thing that the cats should, in comparison with other sacred animals, be so constantly and variously adorned: ear-rings, scarabs, necklaces, disk and/or uraeus, are all found on them. But a nose-ring was a complete novelty to me. Later, however, the reduction of an amorphous lump of bronze revealed another specimen (Pl. vi, 6); the ring itself is missing, but the place for it is clearly there. Dr. Caroline Williams refers in her *Gold and Silver Jewelry* (p. 8, n. 45) to a woman of the time of the Twenty-second Dynasty, probably a foreigner, buried with a nose-ring in position (see Peet, *Cemeteries of Abydos*, II, 47), and states (p. 8) that these barbarous ornaments are almost unknown in Egypt;² she informs me that there is a bronze head of a cat with a silver nose-ring in the Berlin Museum. Yet another instance of this adornment is a little blue-glazed faience janiform figure³ of Bes in the British Museum, the gift of Sir Robert Mond, which is equipped with both ear- and nose-rings, the latter, lunate in form, of silver. It is assigned to the period between the Nineteenth and Twenty-second Dynasties. We thus have examples, covering a considerable period, of nose-rings worn by a woman, by cat figures, and by a god. Mere local fashion is ruled out. The dealer from whom I purchased the figure of Pl. vi, 5 stated that it had come to Luxor 'from the South'. Possibly the custom originated in Ethiopia, and was brought northwards through the medium of travellers. At present we have yet another mystery connected with the cat of Bastet.

7. CAT FAMILIES

Cats are frequently represented in groups of varying numbers, but only one of these, the family group, is our present concern. Though by no means lacking in interest, it does not

¹ e.g. *Urkunden*, v, 52, 14.

² Lane, in his *Modern Egyptians* (Appendix A), says 'The *khizām* or nose-ring . . . is worn by a few of the women of the lower order in Cairo, and by many of those in the country towns and villages both of Upper and Lower Egypt.' The fashion may have been an inheritance from early days, although to my knowledge there is nothing to support this view in the ancient Egyptian tomb-pictures, nor can I find any evidence of it during the Christian and Saracen periods. Another possible source may be suspected in Palestine and Syria, in view of the record of the wearing of nose-rings by Rebekah in Genesis xxiv. 47 and generally in Isaiah iii. 21 and Ezekiel xvi. 12. As these references are so few and are strictly Hebraic it would be unwise as yet to read into them a starting-point for the explanation of the nose-ringed cats.

³ See *Brit. Mus. Quarterly* 4, Pl. lix, h.

appear to have been discussed hitherto. Family groups are found in both bronze and faience. The former are usually normal in attitude and number and are without special characteristics, but the latter present numerous curious features, and only these will be discussed here. These faience pieces have normally a rather coarse, thick glaze, of colours ranging between bright blue and dull green; they are often decorated with brown or black spots. As the specimens given on Pl. vii, 1-16 show, they are ringed for suspension, and were therefore probably pendants to necklaces, which suggests that they were amuletic and personal rather than votive as many of the bronze groups presumably were. Most of them are between 3.5 and 5 cm. high, though one tiny group (Pl. vii, 16) is but 1.3 cm. in height. The range of date is, I think, from the Bubastite Period onwards.

In its simplest form the 'family' group consists of a cat and one kitten, the latter usually snugly ensconced between its mother's knees (Pl. vii, 1-3; Pl. vi, 2), with a pleasing variant where the mother protects her kitten with an encircling paw (Pl. vii, 4). When there are two kittens we find them placed in front of (Pl. vii, 5) or beside or behind the maternal forelegs; there are very rare examples (Pl. vii, 6, 7), in which the mother is shown with her forepaws on the kittens' heads, almost as though in an attitude of benediction. As the number of the family increases we find the kittens crowded into impossible positions, and with the maximum and abnormal number of ten they are placed on the mother's head and back, and even on the suspension-ring (Pl. vii, 8-11).

Finally, we have a group of families which must have some special significance. Some of these are shown in Pl. vii, 12-15; though unfortunately imperfect, they supplement one another, so that the type may be established with certainty. The kittens, usually the unfeline number of ten, are placed unnaturally (though I know none in this series on the suspension-rings), and two features are specially noticeable: the architectural formation of the group, which is built up pyramidally, and the insistence on the act of presentation, which is carried to the point of falsifying the shape of the mother-cat's forelegs. I can find nothing in Egyptian art analogous to these strange groups; they are confined to what is yet another aspect of Bastet's cat, the meaning of which at present eludes us. The 'family' group seems to be peculiar to the cat; and while the singleton cats may be regarded as images of Bastet, or possibly in some cases of Rē, the presence of kittens complicates the matter, for I know of no reference to Bastet as a mother. However, in view of her special qualities and the picture Herodotus gives of her festival, it may be that we have here symbols of fecundity, amulets to ensure more children in the future or protection of children in being. In the kitten sprawling on its mother's back we should, I think, see only an expedient to find room for a last but essential member of the family. The kitten perched on the maternal head recalls the famous snake-carrying goddess of Knossos, who bears a cat or a cat-image on her turbaned head; this theme we also find in Egypt in connexion with lioness-headed goddesses, two of whom are recorded with cats on their heads in the Hilton Price Catalogue, one (no. 2505) from El-Dēr el-Bahri, the other (2506) from Bubastis. And in the British Museum there is the upper part of a similar goddess (no. 16037) with two cats perched between her ears. The idea is therefore not peculiar to the cat, although in these lioness-headed cat-bearers we may perhaps see the goddess Bastet. Such figures recall the one mention of the cat in the Bible or Apocrypha, where Baruch (vi. 22), exulting over the end of idols, says 'upon their bodies and heads sit bats, swallows, and birds, and the cats also'. The mention of cats is curious; can the prophet have had in mind one of these little images or its temple prototype—a memory of old days of alien splendour that, to new thought, might serve as a symbol of futility and degradation?



SMALL EGYPTIAN FIGURES OF CATS
Scale 2:3

THE BREMNER-RHIND PAPYRUS—I

By R. O. FAULKNER

A. THE SONGS OF ISIS AND NEPHTHYS

THE religious papyri of the Graeco-Roman period are a source of information for Egyptian myth and ritual which has been comparatively little exploited. Of this group of papyri, the members of which are scattered in quite considerable number in the principal museums of the world, the Bremner-Rhind papyrus (British Museum, no. 10188) is probably one of the largest and certainly one of the oldest, since it dates back to not long after the end of the Thirtieth Dynasty. That it belongs at latest to the fourth century B.C. is made quite certain by the date of 'the twelfth year, fourth month of the inundation-season, of Pharaoh Alexander, son of Alexander', i.e. 312-311 B.C.,¹ given in the so-called 'Colophon', which was added by an owner of the papyrus in a hand different from that of the rest of the document. The papyrus was therefore written prior to that date, but probably not very much earlier, since palaeographically it belongs to the Ptolemaic group.

Nothing definite is known of the *provenance* of the manuscript,² but the presumed last owner, the priest Nasmin who wrote the 'Colophon', appears to have been a Theban, judging by the priestly titles he bore. Although there is no direct evidence bearing on the point, it seems probable that the papyrus came from his tomb, and it would be interesting to know in what circumstances a book which appears to have been written originally for a temple library came into the private possession of a member of the priesthood.

The papyrus as a whole contains four distinct works of a ritual nature, namely the *Songs of Isis and Nephthys*, the *Ritual of Bringing in Sokar*, the *Book of Overthrowing Apep*, and, as a pendant to the last-named, the *Names of Apep, which shall not be*. Of these four texts, only the first is treated in the present paper.³ It is a work of similar tenor to the *Lamentations of Isis and Nephthys* contained in Pap. Berlin 3008,⁴ but considerably longer, and contains a series of hymns sung by two priestesses representing the goddesses Isis and Nephthys in the course of the celebration of the Osirian mysteries. Unlike the *Lamentations*, however, where both goddesses are on an equal footing, Nephthys is here rather in the background; her role is solely that of a duettist with Isis, while all solo parts are confined to the latter, apart from a hymn to Osiris recited by the officiating lector-priest (9, 13—11, 5). The text begins with instructions for the preparation of the temple and the adornment of the two priestesses, who must be virgins. The priestesses and the lector-priest open the proceedings with preliminary invocations of Osiris, after which the priestesses commence their real duties, the hymns they sing purporting to be the mourning of Isis and Nephthys for the departed Osiris

¹ Or perhaps about 306 B.C., since according to Bevan, *The Ptolemaic Dynasty*, 28, the years of the young Alexander's reign were reckoned from the death of Philip Arrhidaeus, and documents continued to be dated in the name of the former for some years after his murder in 311 B.C.

² For the history of the papyrus since it was acquired by Mr. A. H. Rhind, cf. Budge, *Egyptian Hieratic Papyri in the British Museum* (First Series), ix, and Faulkner, *The Papyrus Bremner-Rhind* (*Bibliotheca Aegyptiaca*, III), iii. The following translation is based on the transcription published in the latter work.

³ It is proposed to deal with the remaining texts in subsequent parts of this *Journal*.

⁴ See *Mélanges Maspero* I, 337 ff.; for a comparison of the two texts see *op. cit.* 347 ff.

and their summons to the god to rise again. They open with a duet (1, 10—3, 12); then Isis alone speaks for four lines (3, 13—16).¹ The duet is resumed in 3, 17 until 3, 22. At 3, 23 a rubric indicates that the performance is interrupted by an unspecified rite of protective magic (*stst*), after which a new duet commences. This continues until a rubric (6, 23) marks the beginning of a new hymn. This opens with a duet, which, however, soon becomes a solo by Isis (6, 27). Nephthys resumes her part at 7, 24, but at 8, 3 she drops out and Isis continues alone until 8, 21. Here the other joins in again until 9, 8, where Isis concludes this stage of the ritual with five solo lines. The officiating lector-priest now executes another protective magical rite (9, 13) and then himself proceeds to recite a hymn to Osiris. At 11, 6, following the line 'Thine are the Two Sisters', the priestesses join in, and the lector-priest possibly now retires. A rubric at 11, 19 marks a new duet, which continues until at 12, 9 Isis once again sings alone. Nephthys appears to partner her again at 13, 13 for eight lines, but Isis is singing alone in 13, 21, and her solo appears to continue until the end (17, 12); at least there is no employment of the 1st person plural pronoun to indicate clearly that both are singing, although from 16, 4 onwards the absence of the 1st person singular pronoun does rather suggest that the performance ended, as it began, with a duet.

The interest of the text from the point of view of the student lies not so much in the information it imparts on Egyptian belief—though the markedly solar character of the lector-priest's hymn to Osiris is worthy of note—as in the fact that we have here a part of the dialogue spoken in the enactment of the drama of the Passion of Osiris, often spoken of as the Osirian Mysteries. A certain amount of information on this early 'passion-play', of which we learn from the well-known inscription of Ikhnofret that it is at least as old as the Middle Kingdom, can be gathered from Egyptian sources, especially from the inscriptions of the temple of Denderah, but the present text, with its alternations of duet and solo and the occasional interpolation of magical rites, sheds a welcome light on the nature of the ceremonies. It is possible, of course, that the somewhat elaborate ritual evidenced by this series of hymns is a late development which has arisen out of the predominant position of Osiris in Egyptian religion at this period—we possess a contemporary version of a much shorter and simpler nature in the *Lamentations*—but it seems highly probable that some such performance by a pair of priestesses was included in the Mysteries from the first.

In the translation which is appended the following symbols have been employed:

[] marks a restoration of the original text.

< > shows that a word omitted in the original has been supplied.

() marks English words inserted to clarify the sense.

[. . . .] marks lacunae.

. indicates inability to translate.

Words written in the original in red ink have been printed in small capitals.

Translation

- 1, 1 | HERE BEGIN THE STANZAS OF the Festival of the Two Kites which is celebrated in the temple
 1, 2 of Osiris, First of the Westerners, the great god, Lord of Abydos, in | the fourth month of
 Inundation, from the twenty-second day down to the twenty-sixth day. THE ENTIRE TEMPLE
 1, 3 SHALL BE SANCTIFIED, AND THERE SHALL BE BROUGHT IN [TWO] women pure | of body and
 1, 4 virgin, with the hair of their bodies removed, their heads adorned with wigs, | [. . . .] tam-
 bourines in their hands, and their names inscribed on their arms, to wit Isis and Nephthys, |
 1, 5 and they shall sing from the stanzas of this book in the presence of this god.

¹ The alternations between duet and solo can be detected by the changes from the 1st person plural to the 1st person singular and back again.


1, 6 | THEY SHALL SAY: O my lord Osiris!—FOUR TIMES.¹

1, 8 RECITATION BY the chief lector of this temple: | O great one of heaven and earth!—FOUR TIMES.

RECITATION BY the two long-haired ones:

- 1, 10 O fair Stripling, come to thine house;
For a very long while we have not seen thee.
O fair Sistrum-player, come to thine house;
O thou who dwellest in—*lacuna*²—after thou didst desert us.
O fair Stripling who didst depart untimely,
- 1, 15 In thy³ prime, out of due season;
Sacred image of thy father Tanen,
Mysterious seed which issued from Atūm,
A lord, a lord who art exalted above thy fathers,
The first-born in the womb of thy mother.
- 1, 20 O that thou wouldst come to us in thy former shape,
That we might embrace thee, thou forsaking us not.
O fair of countenance, the well-beloved,
Image of Tanen, Male, lord of passion,
[The first-born(?)] who opened the womb,
- 1, 25 Whose body [was weary] when it was bandaged,
Come thou in peace, our Lord, that we may see thee,
And that the Two Sisters [may protect] thy body, there being no injury in thee,
[.....] the evil as though it had never been.
- 2, 1 Our Head, turn back to us (?);
Great mourning is among the gods,
For they (?) cannot discern the way which thou hast travelled,
O thou young Child, out of due season.
- 2, 5 Mayest thou travel around heaven and earth in thy former shape,
For thou art the Bull of the Two Sisters.
Come thou, O young Child, in peace,
O our Lord, that we may see thee;
Consort thou with us after the manner of a male
- 2, 10 —TEBHA to his execution-block!—
Come thou in peace, thou eldest son of thy father,
Thou being established in thine house without fear,
And thy son Horus protecting thee;
For NEKI is gone,
- 2, 15 He is in his hell of fire every day,
His name has been cut off from among all the gods,
AND TEBHA IS DEAD IN SLAUGHTER (?).
But thou art at thine house without fear,
WHILE SETH IS IN ALL THE EVIL WHICH HE HAS DONE.
- 2, 20 He has disturbed the order of the sky (?),
He has constricted thought for us (??)
The earth has encroached upon us (??)
Foulness (?) being on the brow [.....]
- 3, 1 Someone is brought in dead (?)

¹ From here onward to the end of the *Songs* only the first line of each column and thereafter every fifth line have been numbered.

² ; see Commentary.

³ Where necessary, in order to accord with English usage, the 3rd person of the original has been rendered by the 2nd person.

- And our eyes are weeping for thee,
 The tears (?) burn.
 Woe (is us) since our Lord was parted from us!
- 3, 5 O thou who art fair of countenance, lord of love,
 O Bull who impregnates cows,
 Come, O Sistrum-player, gleaming of countenance,
 O thou who art uniquely youthful, beauteous to behold,
 Lord among women,
- 3, 10 Male of cows,
 O Child, master of beauty,
 O that we might see thee in thy former shape,

(*Isis sings*)

- Even as I desire to see thee!
 I am thy sister Isis, the desire of thine heart,
- 3, 15 (Yearning) after thy love whilst thou art far away;
 I flood this land (with tears?) to-day.

(*Duet*)

- Draw nigh, so please you, to us;
 We miss (?) life through lack of thee.
 Come thou in peace, O our Lord, that we may see thee,
- 3, 20 O Sovereign, come in peace,
 Drive trouble (?) from out of our house,
 Consort thou with us after the manner of a male.

A PROTECTIVE RITE.—RECITATION BY the long-haired ones:

- O Osiris, Bull of the West,
- 3, 25 The One enduring, exalted above the gods,
 Child who begets,
- 4, 1 Eldest heir of Gēb,
 Offspring of a god among the gods,
 Come thou to the Two Widows!
 The entire Ennead serve thee,
- 4, 5 They ward off SETH for thee WHEN HE COMES;
 May he whose name is evil be behind the shrine in the presence of thy father Rē
 When he administers the punishment of the rebellious.
 Come hither to thy songstresses,
 And drive care from out of our house;
- 4, 10 Come hither to thy songstresses,
 For it is not fitting for thee to dwell alone.
 Our Lord is in peace <in?> his place!
 He who was stronger (?) than he has struck down (?) him whose face is mild,
 Since NEBED has joined (?) WITH HIS FOES
- 4, 15 And troubles the earth with his designs.
 Great mourning is among the gods,
 The Ennead (sit) with head on lap because of thee,
 Inasmuch as thou art exalted above the gods.
 Where is he who (once) trod the earth, who was great even <in> the womb,
- 4, 20 With the uraeus on his head?
 Whence comes he who fashioned himself at his own desire?
 Body of a god, lord of love, the exalted one rich in love,

- O thou Soul, mayest thou live again!
 The Two Sisters protect thy body,
- 4, 25 Even they who came hither to thee aforetime;
 A million mourn for thee
 Like [.] all the gods.
- 5, 1 Come hither <to> thy songstresses!
 Thy father Rē strikes AT NEBED;
 The Ennead serve thee as thine entourage, they ward off the RED ONES for thee.
 Expel thou the great misery of thy Two Women,
- 5, 5 Thine house being in festival, the evil one at his place of slaughter and the rebellious one in
 all the evil which he has done,
 —He has oppressed the land with his evil designs,
 He has felled the sky to the ground—
 Having been driven back and taken into the place of execution,
 And having been taken to the slaughter-block of THE REBELLIOUS.
- 5, 10 Thy father Rē will attend to thy need,
 Thy son Horus will protect thee:
 Mayest thou land as thou wast wont to do,
 Mayest thou traverse the sky to its four quarters,
 Mayest thou alight on earth at the hall (?) of the Great Temple,
- 5, 15 The Two Ladies serving thee.
 Raise thee up! Raise thee up! Behold SETH is in the place of execution,
 AND HE WHO REBELLED AGAINST THEE shall not be.
 Come thou to thine house, O Osiris, thy place where men seek to see thee;
 Hear thou the plaint of Horus in the arms of his mother Isis.
- 5, 20 But thou art repulsed, being scattered through all lands, and he who shall reunite thy body,
 he shall inherit thine estate.
 O great god, provide thyself with thy shape,
 Forsake not thine house, O Osiris!
 Come thou in peace to thy place, O lord of dread, in whose form is all beauty,
 O great Bull, lord of passion,
- 5, 25 Lie thou with thy sister Isis,
 Remove thou the pain which is in [her body,]
 That she may embrace thee, for thou wilt not forsake her;
- 6, 1 Place thou life on the forehead of the Cow.
 Oho! thou art protected, O thou who wast drowned in the nome of Aphroditopolis,
 For the evil is as though it had never been.
 Thy sister comes to thee that she may purify thy body,
- 6, 5 O great living god, O well-beloved,
 Who didst bring thyself up before the face of Upper and Lower Egypt.
 Adorn thyself, O lord of adornment,
 O Male, thou great one who art master of beauty,
 Come thou to thy mother Nut that she may spread herself over thee when thou comest to her,
- 6, 10 That she may guard thy flesh from all evil,
 That she may go within her (?),
 And that she may drive off all evil which appertains to thy flesh,
 The loneliness being broken as though it had never been.
 The Child, the Lord who came forth from the Lower Heaven,
- 6, 15 He has made this land as (it was) before;
 The Lord, the Child who came forth from the womb of her whom the gods made pregnant,
 Who opened the West (out of) due season,
 The Child departs untimely.

- Thy father Rē will protect thee,
 6, 20 Thy son Horus refashions thee,
 AND SETH IS IN ALL THE EVIL WHICH HE HAS DONE;
 Come thou to thine house without fear.

RECITATION BY THE LONG-HAIRED ONES:

- O fair Sistrum-player, come to thine house,
 6, 25 Be thou exalted, exalted, thy back to thine house (?)
 The gods being on their thrones.

(Isis sings)

- I am a woman beneficial to her brother,
 Thy wife, <thy> sister by thine (own) mother;
 7, 1 Come thou to me quickly,
 Since I desire to see thy face after not having seen thy face.
 Darkness is here for us in my sight even while Rē is in the sky;
 The sky is merged in the earth and a shadow is made in the earth to-day.
 7, 5 My heart is hot at thy wrongful separation;
 My heart is hot (because) thou hast turned thy back to me;
 For there was never a fault which thou didst find in me.
 The Two Regions are upheaved, the roads are confused,
 While I am seeking in order to see thee;
 7, 10 While I am in a city which has no ramparts,
 I yearn for thy love toward me.
 Come! Be not alone! Be not far off!
 Behold, thy son Horus will drive back TEBHA TO THE EXECUTION-BLOCK.
 I hid me in the bulrushes to conceal thy son in order to avenge thee,
 7, 15 Because it is a very evil state of affairs, the being far from thee,
 And it is not fitting for thy flesh.
 I walk alone, wandering in the bulrushes,
 And many (?) are enraged against thy son.
 It befell that a woman was hostile to (?) the boy,
 7, 20 But I knew, and also the Chief Justice.
 I have travelled the roads, I have turned aside after my brother who forsook (me) wrong-
 fully.
 Hot are the hearts of myriads of persons,
 Great sorrow (?) is among the gods.

(Duet)

- We lament the Lord,
 7, 25 For love of thee is not lacking with us.
 O thou Male, lord of passion,
 King of Lower Egypt, lord of eternity,
 8, 1 Ascend into life, O prince of eternity,
 For Nenrekh is dead.

(Isis sings)

- O King of Upper and Lower Egypt, O Lord, who didst proceed to the Sacred Land, there is
 no (helping) act of thine in which I can trust;
 O my Brother, O Lord, who didst proceed to the Silent Land,
 8, 5 Come thou to me in thy former shape,
 Come in peace, in peace!
 O King of Lower Egypt, O Sovereign, come in peace!

- Would that we could see thy face as of old, even as I have desired to see thee;
 Mine arms are upraised to protect thee, O thou whom I have desired.
 8, 10 I have loved the two Northern Regions (?) because of (?) knowing (?)
 That thou hast received the head-dress in them;
 Thy dust is myrrh.
 O Husband, brother, lord of love, come thou in peace to thy place;
 O fair Sistrum-player, come to thine house; it is long indeed that thou hast been in cessation.
 8, 15 Mysterious are thy things as Bull of the West;
 Hidden (?) is thy flesh within the House of Henu;
 Hail (to thee) in thy name of Prince of Eternity!
 Horus comes <to> thee as champion,
 He purifies thy body, he gathers up for thee the efflux which issued from thee.
 8, 20 Join together thy body, O great god, provide thee with thy shape.

(Duet)

- Come thou in peace, our Lord, who art young again,
 Thy son Horus protecting thee;
 Come thou out of thine house, for thy temple is flooded with love of thee,
 O Beneficent Sovereign whom she broke out of the egg.
 8, 25 Unique, mighty of strength,
 He is indeed a son who opened the womb,
 And the power of Gēb is over his mother.
 9, 1 O Adorned One, great of love,
 Who acted against the West, his valour aroused (?),
 O Lord of the Netherworld, Bull of the West, Offspring of Rē-Harakhte,
 O Child, beauteous to behold,
 9, 5 Come thou to us in peace, in peace;
 Assuage thou thy wrath, banish thou anger,
 O our Lord, come thou to us in peace, in peace!

(Isis sings)

- Ho thou youth, come in peace!
 Ho, thou brother of mine,
 9, 10 Come, that I may see thee, O King of Lower Egypt, Prince of Eternity!
 Be not weary in the weariness of thine heart, O our Lord;
 Come thou to thine house without fear.

THE GREAT RITE OF PROTECTION, UNSEEN, UNHEARD. RECITATION BY THE LECTOR:

- O fair Sistrum-player, come to thine house;
 9, 15 The Ennead is seeking to see thee, O Child, O Lord, who openedst the womb;
 O Child, love of thee is over thee,
 O Heir, beneficent in opening (?) it,
 Beneficent son who went forth from Him-who-sees-and-hears,
 Isis has cared for thee; be not far from thy place.
 9, 20 Their heads are taken away for love of thee,
 They mourn for thee in dishevelment (?), the hair of their heads disordered (?).
 O (King) Onnophris, lord of provisions, Sovereign, thou most majestic,
 God above the gods,
 Thou launchest the bark of him who begat himself,
 9, 25 Thou art more than the gods.
 The Nile is the efflux of thy body, to nourish the nobility and the common folk,
 Lord of provision, prince of green plants,

- [.] great one, tree of life which givest offerings <to> the gods,
 10, 1 And invocation-offerings unto the spirits;
 O Thou who awakest in health, lord of the bier,
 Lord of the Udjat-eye, mysterious in the horizon,
 Who shinest in due season,
 10, 5 And who risest at thy proper time,
 To thee belongs sunlight, O thou who art equipped with rays;
 Thou shinest at the left hand of Atūm,
 Thou art seen in the place of Rē.
 When his rays are darkened (?), thou art mummified;
 10, 10 Thy son Horus flies behind Rē;
 Thou shinest in the morning, thou settest in the evening,
 Thy being is every day,
 Thou art at the left hand of Atūm, eternity and everlasting are manifestations of thee.
 Abominable is Nebed, who is destroyed in the Presence,
 10, 15 He is doomed (?) on account of his evil renown (?);
 Let him be turned back, A REBEL against whom this destruction has come.
 The *imy-shy* priest makes presentation to thee,
 He extols all the gods;
 The Ennead rejoice at thine approach,
 10, 20 And thou passest thy time with Rē every day.
 O Image, thou art seen at the left hand (of Atūm);
 O Image, thou beholdest the living;
 To thee belongs the light of the Solar Disk,
 Thine is the entire Ennead,
 10, 25 She who is on thine head rejoices before thee,
 Her flame attacks THY FOES.
 Rejoice at us, for thy bones are assembled for thee,
 And thy senses are recovered daily;
 11, 1 Thou comest in like Atūm in his time, without being held back,
 And thy neck is made firm for thee.
 Wepwawet opens for thee the mountain and breaks open the burial;
 Thine is the lord of the Sacred Land,
 11, 5 Thine are the Two Sisters.

(Duet)

Thou hast forgotten sorrow because of us (?).
 They reassemble thy limbs for thee with mourning,
 Seeking to care for thy corpse.

- 11, 10 Come thou to us, that he who rebelled against thee may not be remembered;
 Come thou in thine earthly shape,
 Cease from thy wrath, and be gracious unto us, O Lord;
 Take the heritage of the Two Lands;
 O god, uniquely beneficent of governance unto the gods,
 11, 15 All the gods rejoice at thee;
 Come thou to thine house without fear.
 Rē loves thee, thy Two Women love thee,
 Thou resting in thy place for ever.

RECITATION BY the two long-haired ones:

- 11, 20 O fair Sistrum-player, come to thine house;
 Be exalted, be exalted, thy back to (?) thine house, the gods being on their thrones.

Ho! Come in peace!

O King of Lower Egypt, come in peace!

Thy son Horus will protect thee.

11, 25 Mayest thou expel the great misery of thy Two Women,

May thy face illumine us with thy joy,

O Child, according as the desire to see thee.

Come to us; great shall be thy protection <because?> of our love;

12, 1 Come to thine house without fear.

O ye gods who are in heaven,

O ye gods who are on earth,

O ye gods who are in the Netherworld,

12, 5 O ye gods who are in the Nile,

O ye gods who are in the train of the Nile,

Follow us with the Lord, the lord of love,

Brother, Male, lord of passion.

(Isis sings)

Ho! Come to me!

12, 10 Heaven is merged in earth,

And a shadow exists on earth to-day;

Heaven is felled (?) to earth.

Ho! Come with me!

Men and women in the city are seeking our Lord,

12, 15 Who (?) walked the earth in the time of our Lord.

Come to me! Heaven is felled (?) to earth

And the god is caused to come to his place.

Snuff the wind to thy nose!

The Lord is gone into his palace.

12, 20 Ho Rē! Greet this one!

—Thy evil be against thee, O doer of evil!—

Since my heart desires to see thee,

O Heir, King of Lower Egypt, handsome Child!

Ho, lord of love!

12, 25 Come to me, my Lord, that I may see thee to-day;

O Brother, come that we may see thee.

Mine arms are extended to greet thee,

Mine arms are upraised, are upraised to protect thee.

13, 1 O Male, lord of youth, Child! our Lord is greeted (?).

I am a daughter of Gēb (yet) thou wast parted from me,

O youthful one, out of due season.

I walk the roads since love of thee came to me,

13, 5 I tread (?) the earth, I weary not in seeking thee,

Fire is in (?) me through love of thee;

Ho! Come that I may see thee!

I weep because thou art alone;

Come thou to me quickly since <my> desire is to see thee

13, 10 After I have desired to see thy face.

Jubilant is in thy temple (?),

Thou being protected, protected in peace.

(Duet)

Ho! Ho! Our Lord comes to his house;

They place protection about his temple,

- 13, 15 And our Lord comes in peace upon his throne.
 Be established in thine house without fear!
 Be exalted, exalted, O our Lord!
 Harken (?) from afar, O great god!
 Come thou in true peace;
 13, 20 Ascend thou with Rê, having power over the gods!

(Isis sings)

- O Heny, come in peace,
 That I may see thee, O Child, when thou comest in thy child-shape.
 HAI IS FALLEN,
 Horus is ruler,
 13, 25 And he who is stronger (?) than thou can do nought against thee.
 Raise thee up between (?) the Two Sisters,
 O thou whom thy father loves, lord of jubilation,
 The heart of the Ennead is well-disposed unto thee,
 Thy temple is illumined with thy beauty,
 13, 30 The Ennead is in fear through thy majesty,
 14, 1 The earth quakes through dread of thee;
 I am thy wife, who acts on thy behalf (?),
 A sister beneficial to her brother;
 Come that I may see thee, O lord of my love;
 14, 5 Be exalted, exalted, O thou who art great of shape; come, that I may see thee;
 O Youth, walk! O Child, come, that I may see thee.
 The countries and lands weep for thee,
 The regions mourn for thee, inasmuch as thou art He-who-awakes-in-health;
 Heaven and earth weep for thee, inasmuch as thou art greater than the gods;
 14, 10 There is no lack of praising thy ka;
 Come to thine house without fear.
 Thy son Horus the circuit of heaven;
 Babai (?) is in fetters (?) and thou shalt not fear;
 Thy son Horus will protect thee,
 14, 15 He will overthrow for thee THE CONFEDERACY OF NEBED.
 O Lord who art behind me in Djebast (?),
 I see thee to-day, and the savour of thy body is (that) of Pwenet;
 The Noble Women adore thee in peace,
 The entire Ennead rejoices.
 14, 20 Come thou to thy wife in peace;
 Her heart palpitates through love of thee,
 She embraces thee, and thou forsakest her not,
 Her heart rejoices at seeing thy beauty,
 For thou hast removed (?) her from (?) the secret house;
 14, 25 She dispels the evil which appertains to thy flesh,
 And the stroke as though it had never been:
 Thou placest life before <thy> wife.
 Oho! Be thou protected, O thou who wast drowned in the Field of Aphroditopolis on
 this day:
 Great mourning and an evil deed, the like of which has never been.
 15, 1 The Cow weeps for thee with her voice,
 The love of thee is in her heart,
 Her heart palpitates when thou rejoicest over her,
 She embraces thy body with her arms,

- 15, 5 <She> comes to thee in haste—variant:¹ in peace—
 She protects thee from him who would do aught against thee,
 She makes hale for thee thy flesh on thy bones,
 She knits for thee thy nose to thy forehead,
 She gathers together for thee thy bones, and thou art complete.
- 15, 10 Thy mother Nut, she comes to thee in peace,
 She builds thee up with the life of her body.
 Be thou a soul, a soul! Be thou stable, stable!
 Mayest thou have a soul, O Male, lord of women, with the ointment-cone (?) on thine hair,
 when thou comest to the Divine Land;
 The ointment-cone (?) on thine hair is of the myrrh which comes forth of itself.
- 15, 15 Go forth and come in peace, in peace;
 O King of Lower Egypt, Sovereign, come in peace;
 The Lady of Sais, her hands are on thee;
 Shentyt, her heart serves thee;
 Thou art a god who came forth from a god.
- 15, 20 O Mekti, who hast none beside thee!
 Thine hair is of true (?) turquoise when thou comest from the field of turquoise;
 Thine hair is lapis-lazuli, it belongs to lapis-lazuli;
 Lo, lapis-lazuli is over thine hair;
 The colour of thy body which thou hast is that of iron of Upper Egypt;
- 15, 25 Thy bones are fashioned of silver;
 According as thou art (??) a child.
 Thy vertebrae which thou hast are of turquoise
 —variant:² The smell of the incense on thine hair is (that) of the myrrh which comes forth
 of itself—
- 16, 1 Those things which are on thine head are of lapis-lazuli.
 Gēb, he offers up to thee food-offerings,
 He promotes the god who issued from out of him.

(Duet)

- O great Heir who came forth from Rē,
- 16, 5 Eldest One, fair of countenance,
 Living Soul who is <in> Istenu,
 Child who came forth from Him-who-sees-and-hears,
 Elder of the Two Shrines, Heir of Gēb,
 Who gives to thee all the circuit of the sun;
- 16, 10 Come to thine house, O Osiris, who judgest the gods;
 Open thine eyes, that thou mayest see with them;
 Drive thou away the clouds,
 Give thou light to the earth in darkness;
 Come to thine house, O Osiris, First of the Westerners, come to thine house.
- 16, 15 O Thou who camest forth from the womb with the uraeus on thine head,
 Thine eyes illumine the Two Lands and the gods.
 Raise thee, raise thee up, O Sovereign our Lord!
 HE WHO REBELLED AGAINST THEE IS AT THE EXECUTION-BLOCK, AND SHALL NOT BE.
 Be stable, be stable, in thy name of Stable One;
- 16, 20 Thou hast thy body, O (King) Onnophris l.p.h.;
 Thou hast thy flesh, O thou who art weary of heart.
 O Osiris, how fair is that which comes forth from thee!

¹ *Ky dd*, lit. 'another saying'.² *Ky dd*.

- Authoritative utterance it is which is on thy mouth.
 Thy father Tatenen lifts up the sky
 16, 25 That thou mayest tread over its four quarters;
 Thy soul flies in the east;
 Thou art the likeness of Rꜥ,
 And they who dwell in the Netherworld receive thee with joy,
 Gēb breaks open for thee what is in him,
 16, 30 And they come to thee in peace.
 Go thou in peace to Busiris!
 17, 1 Raise thee up, O Osiris!
 Raise thee, raise thee up in peace!
 Isis comes to thee, O Lord of the horizon, inasmuch as (?) she begat the Unique One (?), the
 guide of the gods;
 She will protect thee,
 17, 5 She will guard thee,
 She will guard Horus,
 Even the woman who created a male for her father,
 Mistress of the Universe, who came forth from the Eye of Horus,
 Noble Serpent which issued from Rꜥ,
 17, 10 And which came forth from the pupil in the eye of Atūm
 When Rꜥ arose on the First Occasion.
 It is at an end.

Commentary

1, 1. On $\overline{\text{𓂏}}$ 'stanza' see Gardiner, *The Chester Beatty Papyri No. 1*, 27, with n. 2. On $\overline{\text{𓂏}}$ 'the two kites' who mourn for Osiris, namely Isis the greater kite and Nephthys the lesser kite, see Davies-Gardiner, *Tomb of Amenemhēt*, 49, with n. 2.

1, 2-5. With the instructions for the ceremony compare *Lamentations*, 5, 13 ff.; see *Mél. Maspero*, 1, 341.

1, 3. $\overline{\text{Nn wpt-sn}}$ 'who have not been opened', i.e. who are virgin; for this sense of *wpt* see also 'twenty women . . . *n wpt-sn m mst* who have not been opened in child-birth', *Westcar*, 5, 11.

1, 4. $\overline{\text{𓂏}}$ clearly means 'wig' here, but in *Hirtengeschichte*, 5 the word is used of the 'tresses' of a goddess, and in Naville, *Mythe d'Horus*, Pl. 2 $\overline{\text{𓂏}}$ seems to mean 'giraffe-hide'.

1, 5. $\overline{\text{𓂏}}$ 'tambourine', *Wb.* iv, 191. For a scene showing the 'two kites' actually playing on the tambourine cf. Mariette, *Dendérah* iv, Pl. 55.

1, 9. This rubric marks the commencement of the first duet; the 'long-haired ones' are, of course, the two bewigged priestesses.

1, 11. On this passage see my note in *Mél. Maspero* 1, 342. For the writing of the dependent pronoun 2 masc. sing. cf. Gardiner in *PSBA* 31, 10.

1, 12. The like expression, *Lamentations*, 2, 2. *Thy* is properly the title of the youthful god Harsomtus, son of Hathor, cf. *JEA* 6, 57, with n. 2, but it is a peculiarity of this text, and to a lesser degree of the *Lamentations*, that the deceased Osiris is frequently invoked with epithets more appropriate to young gods such as Harsomtus or Harseisis, e.g. $\overline{\text{𓂏}}$ 1, 10, 14; 2, 4; $\overline{\text{𓂏}}$ 2, 4, 7; 3, 11, 26 and often; $\overline{\text{𓂏}}$ 2, 11; 14, 26; $\overline{\text{𓂏}}$ (confusion of *sdty* and *h*) 6, 14; $\overline{\text{𓂏}}$ 13, 1. This anomaly is doubtless to be explained by a desire to stress the persistence of Osiris' pristine vigour despite his death, on which see Breasted, *Development of Religion and Thought in Ancient Egypt*, 28, with n. 2.

1, 13. $\overline{\text{𓂏}}$ is doubtless an indication of a lacuna in the scribe's original, and an abbrevia-

tion of the full phrase *gm ws* 'found defective'; *hnty* must be part of an epithet of Osiris of which the remainder is lost.

1, 14. For the expression $\overline{\text{𓂏𓂏𓂏}}$ 'not (in due) time', 'untimely', cf. $\overline{\text{𓂏𓂏𓂏𓂏𓂏}}$ 'who destroyed me in my childhood ere due time had come', Erman, *Zwei Grabsteine griechischer Zeit*, in *Festschrift für E. Sachau*, 104; for the force of *nw* compare also $\overline{\text{𓂏𓂏𓂏}}$ 'at the (proper) time', Newberry, *Rekhmara*, 2, 7.

1, 17. $\overline{\text{𓂏𓂏}}$ is a puzzle, since it seems quite meaningless. It is perhaps intended for an ending *y* to *st*; it can hardly be for prothetic $\overline{\text{𓂏}}$ in the participle *pr*, since this text does not indicate that inflexion.

1, 25. *Nwh* 'to bind, fetter' is used here apparently of the bandaging of the corpse in mummification.

1, 27. *Nn im-k st* 'there being no injury in thee'; for the word-order compare $\overline{\text{𓂏𓂏𓂏𓂏}}$ 'lying there', *Wenamün*, 2, 43-4; similarly $\overline{\text{𓂏𓂏𓂏𓂏}}$ *ibid.*, 2, 62. On *st* see Gardiner, *PSBA* 34, 261, n. 14.

1, 28. The lacuna doubtless originally contained some expression for 'removing' or 'dispersing' the evil.

2, 1. An obscure sentence. It is possible that *tp-n* 'our head' refers to Osiris, perhaps in a play upon the word in the double sense (1) of a head turning back to look in a desired direction and (2) of Osiris as 'head' of his people. $\overline{\text{𓂏𓂏}}$ is a late writing of the pronominal form of the preposition *hr*, again 3, 2; 9, 16; cf. *Pap. Abbott*, rt. 5, 18 ($\overline{\text{𓂏𓂏𓂏𓂏}}$); *Pap. Amherst*, 3, 9 ($\overline{\text{𓂏𓂏𓂏}}$).

2, 2. With the expression *prt(t) wt* 'great mourning', which occurs again 4, 16; 14, 29, compare $\overline{\text{𓂏𓂏𓂏}}$ 'ceremony of the Great Mourning', on which see Schäfer, *Mysterien des Osiris*, 24-5.

2, 3. *Nn nhb-s mtn ir-n-k* is an obscure sentence which certainly calls for emendation, since the fem. suffix has no noun to which it can refer. Most probably it should be emended into *sn*, referring back to 'gods' in the preceding line; on the writing of *s* for *sn* see Blackman, *JEA* 16, 64. For the sense of $\overline{\text{𓂏}}$ cf. Gardiner, *Notes on the Story of Sinuhe*, 97; the allusion is to the departure of Osiris from the world of the living.

2, 9. $\overline{\text{𓂏}}$ in $\overline{\text{𓂏𓂏}}$ is an abbreviation for *tr* 'male', cf. 12, 8 as compared with 1, 23.

2, 10. A parenthetic execration directed against the foe of Osiris. *Tbhr* as an epithet of Seth is very common in the texts of the temple of Edfu; cf. also *Urk.* vi, 25, 10.

2, 14. $\overline{\text{𓂏𓂏𓂏𓂏}}$ is probably a writing of the old perfective 3rd masc. sing.

2, 17. A corrupt passage; for a possible emendation see the textual note in my published transcription.¹

2, 18. For *snđ n-k* read *snđ-k* as 2, 12.

2, 19. The sense of this must be that Seth's wickedness has recoiled on his own head. In 2, 20 ff. follows an obscure description of his evil deeds; compare 5, 6-7.

2, 20. A difficult sentence which, however, clearly alludes to cosmic disturbances caused by Seth as storm-god. For the rendering of *wd* as 'disturb' cf. *wd m* 'injure' some one, *Urk.* i, 102, 12, later *wd r*, see Gardiner, *Admonitions*, 85; possibly a preposition should be supplied after the verb in the present instance. *Shrb*, translated as 'order', is perhaps the same word as *shrb* 'Verwaltung(?)' *Wb.* iv, 207. $\overline{\text{𓂏𓂏𓂏}}$ is certainly *nwt* 'sky' and not *mnt* 'lower heaven'; compare $\overline{\text{𓂏𓂏𓂏𓂏𓂏}}$ 'he has felled (lit. "sent") the sky to the ground' 5, 7; cf. also *op. cit.* ii, 213 and the writing $\overline{\text{𓂏𓂏𓂏𓂏}}$ for *nwt* 'sky', *Harris mag. pap.*, 5, 2. An alternative possibility, suggested by Gardiner, is to emend $\overline{\text{𓂏𓂏𓂏}}$

¹ Faulkner, *op. cit.* 5.

of the Biblical phrase 'in outer darkness'; compare the expression *hsw krr* 'ye who are behind the shrine' as a description of beings hostile to the dead king, *Pyr.* § 276b.

4, 7. $\overline{\text{I}} \overline{\text{I}}$ is probably a miswriting of $\overline{\text{I}} \overline{\text{I}}$ *sbiw* 'the rebellious one', e.g. 5, 5.

4, 11. For the verb *tis* cf. *Bull.* 29, 63, nn. 6, 7.

4, 12. $\overline{\text{I}}$ or $\overline{\text{I}}$ should be supplied after *htp*.

4, 13. $\overline{\text{I}} \overline{\text{I}} \overline{\text{I}} \overline{\text{I}}$ is probably the *sdm-n-f* form of *skr* 'to strike down'; for a similar writing of the *sdm-n-f* form see $\overline{\text{I}} \overline{\text{I}} \overline{\text{I}} \overline{\text{I}}$ 5, 6. If this view be correct, *wr* 'he who is great(er)' must refer to Seth, whose superior 'greatness' (here apparently in the sense of 'strength' or 'power') enabled him to slay 'him whose face is mild', i.e. Osiris. For another instance of this use of *wr* see 13, 25.

4, 14. The verb $\overline{\text{I}} \overline{\text{I}} \overline{\text{I}} \overline{\text{I}}$ is a difficulty, since none of its recorded meanings fits the present context. A satisfactory sense can be obtained by equating it with $\overline{\text{I}} \overline{\text{I}}$ in the expression *shn hr* 'to be united with', *Wb.* III, 469, but no similar writing of the latter verb appears to be known.—The pronoun in 'his foes' must refer to Osiris.

4, 15. This sentence refers to the evil deeds of Nebed. For $\overline{\text{I}} \overline{\text{I}} \overline{\text{I}} \overline{\text{I}}$ the parallel 5, 6 has $\overline{\text{I}} \overline{\text{I}} \overline{\text{I}} \overline{\text{I}}$. The phrase *hw ti* 'smite the earth' has here a more literal sense than in the passages discussed by Gardiner, *Notes on ... Sinuhe*, 61, where it is a compound expression used of 'exiling' persons; cf. now Gardiner, *Hieratic Papyri in the British Museum (Chester Beatty Gift)*, 16, n. 11; in *Pap. Ch. B. III*, rt., 7, 15 this expression means 'tread the earth'.

4, 16. For *pri(t)* *yt* see note on 2, 2.

4, 17. For *tp must* 'head on lap' without preposition cf. Gardiner, *Notes on ... Sinuhe*, 10.

4, 19. $\overline{\text{I}} \overline{\text{I}}$ probably perfective active participle.

4, 21. *M-bh ib-f*, lit. 'in the presence of his heart', seems to be a unique expression. Assuming *ib* to have the frequent sense 'desire' here, 'in the presence of his desire' might well mean 'at his own desire'.

4, 22. *Dt* 'body' may perhaps have the sense of 'personality' or the like.

4, 26. Lit. 'mourning is thine among a million'; the absence of any suffix speaks against $\overline{\text{I}}$ being a writing of *šnyt* as in 5, 3.

5, 2. $\overline{\text{I}}$ should be supplied before *khb*; on this verb see *Wb.* v, 137.

5, 3. The sense demands that $\overline{\text{I}}$ should be regarded as an abbreviation of *šnyt* 'entourage' rather than as *šn* 'circuit'.—The 'Red Ones' are Seth and his confederates.

5, 6. For *lwh* 'to oppress' written with the water-determinative (taken over from *lwh* 'to moisten') cf. also *Rec. de Trav.* 4, 131. This sentence and 5, 7, which describe the 'evil' mentioned in 5, 5, form a parenthesis inserted between that sentence and 5, 8, which continues the description of the fate of a rebel.

5, 7. See note on 2, 20; *hwb* is lit. 'sent', and is probably the correct reading, as *hr* 'fall' is usually intransitive. For the idea of the sky falling to the earth compare the threat of Neith, 'Do not do these great acts of wickedness, else I will be angry and the sky shall crash to the earth', *Horus and Seth*, 3, 2-3.—For the writing of *stw* 'ground' cf. *Amenemope*, 1, 13.

5, 8. This sentence continues on from 5, 5 after the parenthesis. The choice of preposition in *msb m hbt* is unusual, *r* being customary after the verb in this sense, as in 5, 9, but compare *m hbt* again in 5, 16.

5, 11. For *wšb* 'to protect' as transitive verb cf. 7, 14; *Israel Stela*, 15, 17.

5, 13. $\overline{\text{I}} \overline{\text{I}} \overline{\text{I}} \overline{\text{I}}$ is to be read simply *nmi*, this writing being due to confusion of $\overline{\text{I}}$ and $\overline{\text{I}}$ in New Kingdom hieratic; compare Möller, *Hier. Pal.* II, no. 343 in its simpler form

with no. 393. Since in late hieratic these two signs are quite distinct the one from the other (see Möller, *op. cit.* III, nos. 343, 393), the presence of this writing suggests that the history of the text extends back at least to the period of the later Empire. For *nml* used of traversing the sky cf. *Pyr.* §§ 543a; 749c; Budge, *Book of the Dead* (1898 ed.), Text 9, 6, and for the reading of the next word as *n(w)t* 'sky' rather than *nnt* 'lower heaven' cf. the note on 2, 20 and compare the above-mentioned passage, *Pyr.* § 543a.

5, 14. For the transitive use of *hn* cf. *Wb.* III, 287.—The word *nct*, written $\overline{\text{𓂏}}\overline{\text{𓂏}}\overline{\text{𓂏}}$, is possibly to be identified with $\overline{\text{𓂏}}\overline{\text{𓂏}}$ 'room in a temple', *op. cit.* I, 5.

5, 18. *St-k hḥ mṣr-k* 'thy place where men seek to see thee' is lit. 'thy place of seeking to see thee'.

5, 20. *Rdlt m* 'being scattered through' is lit. 'being placed in'. The allusion is to the murder and subsequent dismemberment of Osiris.—For *šsp* 'to inherit' cf. Gardiner, *Inscription of Mes*, p. 18, n. 38.

5, 24. $\overline{\text{𓂏}}\overline{\text{𓂏}}$ is doubtless to be read simply as one word, the last two signs having been added from the more usual phonetic writing $\overline{\text{𓂏}}\overline{\text{𓂏}}$, e.g. 2, 6.

5, 25. For the sense of *spd* cf. *Wb.* I, 9.

5, 26. *Sty* 'pain' in metaphorical sense only here; on the true meaning of this word see Dawson in *JEA* 20, 185.

6, 1. For *wšb* cf. $\overline{\text{𓂏}}\overline{\text{𓂏}}$ 'bull' *Wb.* I, 373; the word here is shown, however, to be feminine by the parallel 14, 27, which substitutes *m tp hmt* 'on the head of the woman'; the allusion is doubtless to Isis in both cases.

6, 7. Compare the epithet $\overline{\text{𓂏}}\overline{\text{𓂏}}$ applied to Osiris in 9, 1.

6, 9. For *pš-s* read *pš-s sy* with reflexive object-pronoun; compare *Pyr.* §§ 580c; 825a.

6, 11. This passage is obviously corrupt, but the fem. suffixes undoubtedly refer to Nut, as in the sentences which precede and follow.

6, 13. The 'loneliness' is that of death, broken by Osiris' restoration to life and to his former companions.

6, 14. $\overline{\text{𓂏}}\overline{\text{𓂏}}$ in this case is not for *nwt* 'sky' but for *nnt* 'lower heaven', whither Osiris went at death and whence he returned at his resurrection.

6, 17. Since the 'opening of the West' is apparently a metaphor for death, the sense demands the emendation *nn is r tr-f* as 1, 15; cf. also 2, 4; this view is confirmed by the association of the expression *šm nn nc* 'depart untimely' with this context both here in 6, 18 and above in 1, 14. To render 'who opened the West at due season', which would have to mean 'rose again', accords ill with the context.

6, 25. The peculiar expression *sr-k r pr-k* 'thy back to thine house' perhaps envisages Osiris as standing in front of his shrine or temple; it occurs again below, 11, 21.

6, 27. The change to the 1st pers. sing. marks the opening of a solo by Isis in which she sings of her adventures while hiding with the infant Horus in the Delta swamps.

7, 3. $\overline{\text{𓂏}}\overline{\text{𓂏}}$ is unknown to the *Wb.*, but Gardiner suggests that it may be a writing of $\overline{\text{𓂏}}\overline{\text{𓂏}}$ 'darkness'. The dative *n-n* 'for us' is unexpected and its position after the adverb is abnormal.

7, 4. The parallel 12, 10-11 substitutes *hpr* for *ir*. The preposition *r* has been omitted after *pt*; cf. 12, 10.

7, 5. For *sfh* in the sense of separation compare 'I am provided with the efflux which went forth from Osiris $\overline{\text{𓂏}}\overline{\text{𓂏}}$ and I shall never be separated from it', Budge, *Book of the Dead* (1898 ed.), Text, 380, 14.

7, 8. $\overline{\text{𓂏}}\overline{\text{𓂏}}$ is probably to be understood as $\overline{\text{𓂏}}\overline{\text{𓂏}}$, on which see *Wb.* I, 238. With *tum wrct*

word has reference to the disarray of the hair of the mourning women in funeral scenes; cf. Davies-Gardiner, *Tomb of Amenemhêt*, Pl. 24.— $\overline{\text{A}} \overline{\text{X}} \overline{\text{J}} \overline{\text{J}} \overline{\text{W}}$ appears also to have reference to displacement of the hair, though whether we should read *msbb šnw* or simply *msbb* with det. $\overline{\text{W}}$ is uncertain; neither usage is known to the *Wb*.

9, 22. 'Onnophris' in a cartouche; so also in 16, 20.

9, 25. For the sense of *prw lw* (= *prw r*) compare *prw hr* 'more than', Gardiner, *Notes on . . . Sinuhe*, 44.

9, 26. $\overline{\text{Q}}$ before *šnh* is probably to be understood as the preposition *r*.

9, 28. Probably supply *n* after *htpw*. With this passage compare 'A boon which the king gives to Amūn lord of the Thrones of the Two Lands, Rē-Harakhte, the Ennead which is in Nekhen and the gods who are in their shrines $\overline{\text{A}} \overline{\text{X}} \overline{\text{J}} \overline{\text{J}} \overline{\text{W}} \overline{\text{A}} \overline{\text{X}} \overline{\text{J}} \overline{\text{J}} \overline{\text{W}} \overline{\text{A}} \overline{\text{X}} \overline{\text{J}} \overline{\text{J}} \overline{\text{W}}$ that they may give their offerings of the tree of life and their provisions in the necropolis to the soul of Djehuti', *Urk.* iv, 130, 14-131, 2.

10, 2. The group $\overline{\text{I}} \overline{\text{P}}$ reads *rs-wds*. For the hieratic form see also von Bergmann, *Buch vom Durchwandeln in Ewigkeit*, l. 51 (transcription on p. 19), and for an account of this deity see *Rec. de Trav.* 37, 62.²

10, 3 ff. Osiris is here identified with the sun.

10, 6. For the sense of *ntk* as indicating possession rather than identity compare 10, 23, where it occurs in parallelism with $\overline{\text{Q}} \overline{\text{Q}} \overline{\text{A}} \overline{\text{X}} \overline{\text{J}} \overline{\text{J}} \overline{\text{W}}$ = older *n-k imy* 10, 24.

10, 7. For the *n* before *lbt* read doubtless *m* as in 10, 13.

10, 9. *Sms* 'to darken' is unknown to the *Wb.*, but the context leaves little doubt that we have here a verb from the same root as *sms* 'darkness'; for *sch* 'to mummify' cf. *Wb.* iv, 59.

10, 10. An allusion to Horus as the winged sun-disk.

10, 13. 'In the Presence' presumably refers to Osiris.

10, 15. *Mt-knw* 'evil renown(?)' is shown by the position of the suffix to be a compound noun; a similar formation is found in *sp-knw* 'evil state of affairs' 7, 15, see the note thereon.

10, 16. It is difficult to account for the feminine demonstrative *twy*, since *nkn* is a masculine noun. Probably it is to be regarded simply as an error for *pwj*.

10, 17. For the *imy-shty* priest cf. also Piehl, *Inscr. hiér.* iii, 35, 4; de Rougé, *Inscr. hiér.*, 59; Brugsch, *Dict. géog.*, 1375.

10, 21. At the end of the line restore $\overline{\text{Q}} \overline{\text{A}} \overline{\text{X}} \overline{\text{J}} \overline{\text{J}} \overline{\text{W}}$, cf. 10, 7, 13.

10, 23. On the sense of *ntk* see note on 10, 6; for $\overline{\text{Q}} \overline{\text{A}} \overline{\text{X}} \overline{\text{J}} \overline{\text{J}} \overline{\text{W}}$ read either $\overline{\text{Q}} \overline{\text{A}} \overline{\text{X}} \overline{\text{J}} \overline{\text{J}} \overline{\text{W}}$ or simply $\overline{\text{Q}} \overline{\text{A}} \overline{\text{X}} \overline{\text{J}} \overline{\text{J}} \overline{\text{W}}$.

10, 24. $\overline{\text{Q}} \overline{\text{Q}} \overline{\text{A}} \overline{\text{X}} \overline{\text{J}} \overline{\text{J}} \overline{\text{W}}$ is clearly a writing of older *n-k imy* 'thine is', Gardiner, *Eg. Gramm.*, § 114, 4; this writing occurs again 11, 4, 5.

10, 25. *Hr(t) tp-k* is the uraeus worn by the god; the fem. gender of $\overline{\text{Q}} \overline{\text{A}} \overline{\text{X}} \overline{\text{J}} \overline{\text{J}} \overline{\text{W}}$ is indicated by the suffix *s* in *nsrt-s* 10, 26.—The preposition *hr* should be supplied before *hn*.

10, 27. The suffix $\overline{\text{A}} \overline{\text{X}} \overline{\text{J}} \overline{\text{J}} \overline{\text{W}}$ in this passage shows that the two priestesses are now joining in.

10, 28. For *ip gt* 'to recover the senses' cf. Lacau, *Textes rel.*, 12, 7. Just as Osiris dies at sunset (cf. 10, 9), so is he resurrected in full possession of his faculties at the next dawn.

11, 2. On this passage cf. Gardiner, *Admonitions*, 89; Gunn, *Syntax*, 5, n. 6.

11, 6. The translation of this sentence is doubtful. For the rendering of *mrcy* as 'sorrow' compare *mrcet* 'tears(?)' 3, 3; see also 7, 23.

11, 8. Emend either *hh-sn* or, less probably, *hr hh*.

11, 9. I am quite unable to translate this sentence.

11, 19. A fresh duet now commences.

¹ Emend $\overline{\text{Q}} \overline{\text{A}} \overline{\text{X}} \overline{\text{J}} \overline{\text{J}} \overline{\text{W}}$

² I owe these references to Mr. H. W. Fairman.

- 11, 21. For the expression *sr-k r pr-k* see also 6, 25, with the note thereon.
- 11, 25. Emend *dr-k lw ur n rpty-k* as 5, 4; on the corruption *dl* or *rdl* for *dr* see my note on *Sallier II*, 2, 10 in *Griffith Studies*, 72.
- 12, 9. The suffix 1st sing. marks a new solo by Isis.
- 12, 10–11. Compare 7, 4, which, however, has *ir* instead of *hpr*.
- 12, 12. *Hb* is probably simply a writing for *hnb* in a sense similar to 5, 7.
- 12, 15. For $\overline{\text{H}} \text{A} \text{Z}$ read probably $\overline{\text{H}} \text{A} \text{Z}$, since the sense seems to demand a participle referring to *tw hmet*.
- 12, 16. For *hb* see above on 12, 12.
- 12, 19. On this use of *hnm* see *Wb.* III, 380, 17.
- 12, 21. A parenthetical execration.
- 13, 2. The group $\overline{\text{H}} \text{A}$ after $\overline{\text{H}} \text{A}$ is inexplicable unless we assume that the scribe has omitted some word or words before it.
- 13, 5. For the sense of $\overline{\text{H}} \text{A} \text{Z}$ cf. *Wb.* III, 288, 1, if it be not simply an error for *hnd*.
- 13, 11. The group $\overline{\text{H}} \text{A}$ is presumably a confusion of $\overline{\text{H}} \text{A}$ and $\overline{\text{H}} \text{A}$.
- 13, 13. The plural suffix $\overline{\text{H}} \text{A}$ shows that the duet with Nephthys is now resumed.
- 13, 14. It is not clear to whom $\overline{\text{H}} \text{A}$ refers; perhaps one should emend to $\overline{\text{H}} \text{A}$.
- 13, 18. $\overline{\text{H}} \text{A}$ is probably identical with $\overline{\text{H}} \text{A}$ *Wb.* II, 162.
- 13, 25. For the sense of *ur* here see note on 4, 13.—For $\overline{\text{H}} \text{A}$ read $\overline{\text{H}} \text{A}$.
- 13, 26. *M dbn im* is an obscure expression to which attaches a strong suspicion of corruption; the translation 'between(?)' is merely a conjecture based on the use of the noun *dbn* for a person's entourage, *Wb.* v, 436.
- 14, 2. *Ir im-k* is probably equivalent to older *ir n-k* 'act on behalf of, help, thee'.
- 14, 12. The meaning of the word *thy* is quite obscure; it can hardly have any connexion with $\overline{\text{H}} \text{A}$ 'to darken', *Pyr.* § 393a; the determinative suggests that a verb *thy* is intended, but there is no word of this reading which suits this context.
- 14, 13. The reading of the first sign as *Bibi* is not certain, as the name of this god is usually written not with the double crown but with the white crown only, e.g. *Urk.* v, 151, 14, 16; 153, 3; Budge, *Book of the Dead* (1898 ed.), Text, 133, 9; on the other hand, the reading *Bibi* suits the context, since this being occasionally appears as hostile to the dead; cf. Budge, *op. cit.*, 260, 11.—*M sphw* is lit. 'in the lasso'; the determinatives of the noun 'lasso' have been taken over from the corresponding verb, cf. *Wb.* IV, 105.
- 14, 16. The sense seems to demand the reading $\overline{\text{H}} \text{A}$ rather than $\overline{\text{H}} \text{A}$, and my published transcription should be emended accordingly; a place-name is much more likely than a word for 'hour'. The place-name in question is perhaps identical with the locality *Dbut* mentioned in *Pyr.* §§ 734c; 1668a; 1993c, with which Horus is closely associated.
- 14, 23. Emend *mr-k nfr-k* into *mr nfr-k*; the literal translation 'to see thee and thy beauty' is too harsh to be acceptable.
- 14, 24. For the transitive use of *hri* see *Wb.* III, 146, top; but one would expect the following preposition to be *r* rather than *m*.
- 15, 2. On the archaic use of *dr* as a preposition of place see Sethe, *Dramat. Texte*, 24.
- 15, 13. $\overline{\text{H}} \text{A}$ is probably simply a writing for *t* 'male', combining the abbreviation $\overline{\text{H}} \text{A}$ with the full writing of the word; the emendation ($\overline{\text{H}} \text{A}$) $\overline{\text{H}} \text{A}$ suggested in my textual note on this passage is less likely, since it involves the repetition of the word for 'male', and should therefore not be adopted.
- 15, 14. 'The myrrh which comes forth of itself' is perhaps ladanum, which is an aromatic resinous exudation from certain plants; on the possible association of this substance with Osiris cf. Newberry in *JEA* 15, 86 ff.

15, 20. The significance of the term *mkṭl* is quite obscure; the determinatives 𓂏 suggest that there has been some confusion with *mktr* 'fortress', 'migdol', *Wb.* II, 164. Perhaps the group transcribed by me as 𓂏 should be read 𓂏 , though our ignorance of the meaning of the word makes the reading uncertain. In any case, it is clearly intended for an epithet of Osiris. In *Wb.* II, 162 the word is read 𓂏 , which is also palaeographically possible, but no suggestion is made as to its real meaning.— 𓂏 is a late writing of the old expression 𓂏 ; for other examples see *JEA* 3, 242.

15, 22. On 'lapis-lazuli' as a description of hair which is glossy black in colour cf. Gardiner, *Chester Beatty Papyri No. I*, 30, n. 3, in its continuation on the foot of p. 31. Probably the term 'turquoise' also applied to Osiris' hair in 15, 21 has a similar sense.

15, 23. 𓂏 is a late writing of *r-hr*; with this passage compare *hrw tp-k m ḥsbḏ* 'those things which are on thine head are lapis-lazuli', 16, 1.

15, 24. On *bṯ* 'iron' see Wainwright in *JEA* 18, 6 ff.

15, 25. Compare *Harris mag. pap.*, 4, 9.

16, 1. Compare *loc. cit.*

16, 2. The 'god who went forth from' Gēb is of course Osiris, who according to Heliopolitan theology was his son.

16, 23. Compare 𓂏 'Lord of Understanding, authoritative utterance is on his mouth', *Cairo hymn to Amūn*, 4, 5.

16, 29. Gēb as earth-god breaks open Osiris' tomb in the earth that he may rise again

16, 30. The suffix *sn* 'they' presumably refers to those who are in the Netherworld.

GLAZED WARE IN EGYPT, INDIA, AND MESOPOTAMIA

By A. LUCAS

I. Glazed Ware in Egypt

THE sequence which at present obtains for glazed ware from ancient Egypt is—first, glazed steatite from the Badarian civilization;¹ second, glazed powdered quartz (faience) from the predynastic period, sequence date 31,² a number of variants of which came in later; third, glazed solid quartz, also from the predynastic period, but sequence date 48,² and fourth, glazed pottery from the Arab period. This sequence, however, is liable to be upset at any time by fresh discoveries, and the natural sequence would seem to be—first, glazed solid quartz, which is the most likely to have been discovered accidentally and to have formed the starting-point for glazed ware (see p. 154); second, glazed quartz powder, the powdering and moulding, or other shaping, of quartz being an ingenious method of avoiding the cutting of such a hard stone; third, glazed steatite, which is merely the substitution of a natural soft stone, that can easily be carved, for a hard stone that can only be cut with difficulty; and fourth, glazed pottery. It seems highly probable, however, that at a very early date attempts were made to glaze pottery, which would have made it not only decorative but also impermeable to liquids, a very desirable property, but any such attempts must have ended in failure, since the only glaze known was an alkaline one, which will not adhere to ordinary clay ware, the lead glaze that will adhere not having been discovered until much later.³

The various kinds of glazed ware enumerated will now be described in order of sequence.

A. GLAZED STEATITE

The earliest glazed material of any kind known from ancient Egypt is steatite, beads of which were very plentiful in the Badarian civilization. Brunton, who found them, suggests that they 'can hardly have been made locally'.⁴ This of course may be so, but it should not be forgotten that steatite is found in Egypt, and that there is a deposit at Gebel Faṭīra less than 100 miles from El-Badāri, slightly to the south-east between the Nile and the Red Sea. Another occurrence of steatite is at Ḥamr, near Aswān, where there is evidence of ancient working, and a third in Wādī Gūlan, opposite Gūlan Island, north of Rās Benas on the Red Sea coast.

Steatite is a massive form of talc, and consists of hydrated magnesium silicate; it can easily be cut with a knife, or scratched with the finger-nail, its hardness on Mohs' scale being only 1. Its specific gravity is 2·7 to 2·8; it is usually white or grey in colour, though occasionally smoke-black.

Steatite is a very suitable material for carving into small objects such as amulets, beads, scarabs (the greater proportion of which are of steatite), small statuettes, and small vases,

¹ G. Brunton and G. Caton-Thompson, *The Badarian Civilisation*, 27, 28, 41.

² Petrie, *Prehistoric Egypt*, 42.

³ Occasionally pottery was coated with an ordinary resin varnish. The few specimens examined have all been from the Eighteenth Dynasty.

⁴ G. Brunton and G. Caton-Thompson, *op. cit.*, 41.

not only on account of its softness and the consequent ease with which it can be cut, but also because it is fine-grained. It possesses a further quality that makes it satisfactory as a base for glazing, namely, infusibility, and not only may it be heated without decomposition or fracture, but the heating, by dehydrating it, causes it to become hard enough to scratch glass.¹

Glazed steatite continued in use until the 'Arab age',² but glazed scarabs of this material are still being made by the modern forgers of antiquities at Kurnah.

B. FAIENCE

Two years ago the writer published an account of Egyptian faience from the point of view of its composition and method of manufacture.³ Since then he has done a considerable amount of additional work on the subject, the results of which he ventures to think may be of value in giving more precision to what was known previously, and in providing solutions of certain problems previously left unsolved. The work has been largely analytical and experimental, but has included inquiries into modern methods of glazing, with visits to works, and also an investigation of the present day Egyptian methods of making forged faience, with visits to workshops,⁴ at some of which specimens of the materials employed were obtained, which were subsequently analysed.

By 'Egyptian faience' is meant glazed quartz frit (powdered quartz) ware. 'Glazed siliceous ware', suggested by Burton,⁵ is too vague, since it would include glazed siliceous pottery. The term 'glazed pottery' often used to describe Egyptian faience is entirely wrong and misleading, pottery being ware made from clay, shaped while wet and then hardened by baking. The term 'glaze' sometimes used is also wrong, and it would be just as reasonable to call a varnished object 'varnish' as to call a glazed object 'glaze'. Faience may be classified into ordinary faience and a number of variants, all of which may now be described.

Ordinary Faience

Typical Egyptian faience consists of a body material (core) coated with a vitreous, alkaline glaze, and it ranges in date from predynastic times⁶ to as late as the fourteenth century A.D. (see p. 150).

Body Material.

This is always granular, generally friable and often very friable, though sometimes hard, and usually very finely divided, but occasionally comparatively coarse. It is frequently white, or practically white, in colour, but sometimes tinted brown, grey, or yellowish and occasionally very slightly blue or green.⁷

¹ See also H. C. Beck, *Notes on Glazed Stones*, Part I, *Glazed Steatite*, in *Ancient Egypt and the East*, 1934, 69-75. ² Petrie, *op. cit.* 42. ³ A. Lucas, *Ancient Egyptian Materials and Industries* (1934), 100-15.

⁴ For help in this matter the writer is specially indebted to Mr. A. R. Callender, who arranged introductions to several of the forgers, and to Ahmed Effendi Fakhry, Inspector of the Department of Antiquities at Luxor, who has made a special study of the subject, the results of which he placed freely at the writer's disposal, and who also supplied for analysis specimens of some of the materials used. The forgers naturally sometimes employ materials and methods that were not available anciently. The experiments, analyses and tests mentioned in this article were made by the present writer except where otherwise stated.

⁵ W. Burton, *Ancient Egyptian Ceramics*, in *Journal, Royal Society of Arts* 60 (1912), 596.

⁶ Petrie, *Prehistoric Egypt* 42.

⁷ This is friable and not the hard blue or green body material described later as Variant D: it has been noticed from the XVIIIth Dynasty.

Many hundreds, and probably thousands, of specimens of ordinary faience have been examined, but no useful purpose would be served by giving the details of them all, though the colour of the body material of a few may be recorded. Thus, forty-one specimens from the First and Second Dynasties, now in the Cairo Museum, which are important because they belong to a comparatively early period in the history of the material, are as follows:

Colour of Core	Number	Per cent.
Very white	8	20
Grey	3	7
Slightly yellow	11	27
Light to dark brown ¹	19	46
	41	100

The Third-Dynasty small blue tiles from the Step Pyramid at Sakkārah and from the adjoining large tomb have a very fine white core; a number of pieces of inlay from the palace at El-'Amarnah (Eighteenth Dynasty) have a coarse white core; the Nineteenth-to-Twentieth Dynasty specimens from Qantīr² have a coarse brown core; of 18 Graeco-Roman specimens from the Fayyūm 12 have a white, or practically white, core, 5 have a brown core and one a grey core, and 4 specimens of Islamic faience have a very white core.

The body material, whether fine or coarse, is seen when examined microscopically to consist of sharp, angular grains of quartz, without any visible admixture of other substance.

Only very few chemical analyses of this material can be traced, and of these many are unsatisfactory because no particulars of the kind or date of the specimens are given, while in some instances the material analysed was manifestly not ordinary faience but one of the variants. The following analyses may be given:

	1 %	2 %	3 %	4 %	5 %	6 %
Silica	94.0	94.2	94.2	99.6	94.7	94.2
Alumina	1.8	0.6	1.9	0.3	1.4	0.6
Oxide of iron	0.9	1.6	0.3	0.3	1.7	1.6
Lime	2.0	1.7	1.6	0.3	1.8	1.7
Magnesia	1.1	1.8	0.1	...	0.4	1.8
Alkalies	0.3	...	1.1	...	...	...
Not determined . . . . .	...	0.1	0.8	...	...	0.1
	100.1	100.0	100.0	100.2	100.0	100.0

Nos. 1, 2, 3. W. Burton, *Ancient Egyptian Ceramics*, in *Journal, Royal Society of Arts* 60 (1912), 594.

No. 4. XIXth Dynasty; analysed by the writer.

No. 5. XIXth-XXth Dynasty; analysed by the writer.

No. 6. XXIIInd Dynasty, L. Franchet, *Céramique primitive*, 41.

For the white body material only three origins seem possible, namely, powdered quartz rock, powdered rock crystal, or powdered white quartz pebbles, from all of which a material practically identical with the ancient material has been prepared by fine grinding.

¹ The colour suggests the use of powdered sand or sandstone.

² M. Hamza, *Excavations of the Dept. of Antiquities at Qantīr (Faqus District)*, in *Ann. Serv.* 30 (1930), 31-68.

At least one of the modern forgers of faience uses both powdered quartz rock and powdered rock crystal.

For the brown, grey, and yellowish body material, powdered sand, sandstone, or flint seem likely, the colour being due to natural impurities in the material employed.

Glaze.

The glaze, which is most frequently coloured blue, green, or greenish-blue, but is sometimes violet, white, yellow, or of two or more colours,¹ is what is termed an 'alkaline' glaze, and consists of glass; chemically it is essentially a sodium-calcium-silicate or a potassium-calcium-silicate without any lead compound.² Only one complete analysis of the glaze, of which sufficient details are given to make it certain that the specimen was from ordinary faience, can be traced; it is as follows:

	%
Silica	75.6
Alumina	0.8
Oxide of iron	0.8
Lime	3.8
Magnesia	0.7
Potash	10.7
Soda	5.6
Oxide of lead	nil
Oxide of copper	1.8
Oxide of manganese	0.3
	<hr/> 100.1

Blue colour; Roman period, from Dīma (Fayyūm); analysis by J. Clifford, F.I.C., for the writer.

From the results of the analysis it is evident, first, that not only is the glaze glass but it is of similar composition to the ancient glass, except that the proportion of lime (calcium oxide) is lower and that of silica higher than is usual in the ancient glass; and second, that the colour, like that of much of the glass, is due to a copper compound. The large amount of potash and the small amount of soda present show that the alkali employed for this particular glaze was plant ashes and not natron.

A partial analysis of the blue glaze on a predynastic chert or quartzite³ bead made by Sir Herbert Jackson for Mr. Horace Beck showed that it consisted essentially of sodium silicate, with merely a trace of calcium, coloured with a copper compound.⁴ In this instance, since the alkali was soda, the source of it must have been either natron or the ashes from special plants grown near salt water (see p. 152).

Brongniart states⁵ that the glaze of Egyptian faience was examined by Buisons, Laurent, Malaguti, and Salvétat, and that it consists of silica and soda coloured with a copper compound. Franchet also says⁶ that it consists of a compound of silica and soda.

Faience with Extra Layer (Variant A)

Occasionally, instead of there being only two layers of material, namely an inner core coated with glaze, there is also an additional layer between the core and the glaze. This

¹ Black and red faience are described on pp. 145-6. ² For the reason for emphasizing this see p. 149.

³ It is called both chert and quartzite.

⁴ H. C. Beck, *Notes on Glazed Stones*, Part II, *Glazed Quartz*, in *Ancient Egypt and the East*, 1935, 23.

⁵ A. Brongniart, *Traité des arts céramiques ou des poteries* I, 506.

⁶ L. Franchet, *Céramique primitive*, 92.

extra layer was first pointed out by Reisner,¹ whose description of it is the only one that I can trace. Any generalization with respect to the prevalence of this special layer would be dangerous without the examination of more specimens of faience of different kinds and dates than usually fall to the lot of any individual to handle, more especially as it is only with broken objects (which generally are not to be found on exhibition in museums) that its presence or absence can be detected; however, the writer's experience may be given. In addition to the occurrence of this layer in the Twelfth-Dynasty faience from Kerma described by Reisner, it is also present in faience of the same period from Shalfak (Sarras), also in the Sudan, specimens of both of which the writer was kindly allowed to examine; it was not present in the forty-one specimens from the First and Second Dynasties already mentioned on p. 143, nor in the Third-Dynasty blue tiles from Saqqārah; nor in several specimens of the Twelfth Dynasty from Lisht; nor in one specimen of the same date from El-Bersah; and it was found only in one specimen (part of a blue-glazed tile from El-Dēr el-Bahrī) out of several hundreds examined from the Eighteenth Dynasty, though it was present on several undated specimens probably from that Dynasty; it was rarely present in the late material, only comparatively few examples having been found out of many hundreds of specimens examined, these being (a) a few pieces of the coarse brown-body material found by Maḥmūd Eff. Ḥamza at Kaṇṭīr;² (b) one lot of *shawabtī* figures of Twenty-sixth Dynasty date, and (c) two pieces of Graeco-Roman date out of many from the Fayyūm. It was not present on four specimens from the Arab period.

The extra layer, in those instances in which it has been measured (which, however, seem typical of the rest), varied in thickness from about 0.5 mm. to about 2.5 mm. In a Kerma specimen it was white on a light-grey body, and, as Reisner states, very like plaster of Paris in appearance; in a Shalfak specimen it was white on a light-blue body; on the Eighteenth-Dynasty tile mentioned it was white on a faintly blue-tinted body; on the Kaṇṭīr specimens it was white on a brown body; on the Twenty-sixth Dynasty *shawabtī* figures it was white on a dark-grey body, and on one of the Graeco-Roman specimens it was white on a reddish body and on the other it was white on a grey body, and in every instance in which it has been critically examined the extra layer has consisted of very finely powdered quartz, always more finely ground and more compact than the body substance. There can be little doubt that, as stated by Reisner, the special layer was employed for the purpose of enhancing or modifying the colour of the glaze. Thus, when a brown, grey, or yellowish body material would have lessened or spoilt the full brilliance of a blue glaze, a thin layer of a perfectly white material was interposed between the two; sometimes, when a green glaze was required, a yellow layer was used underneath a blue glaze in order to give it a greenish tint, and in one specimen a white layer was used under parts only of a dark-blue glaze in order to give to those parts a lighter colour, thus forming a light-blue pattern on a dark-blue ground.

Black Faience (Variant B)

Black faience is not very common; it is known, however, in the form of small beads of early dynastic date³ (Sixth, Eighth, and Ninth Dynasties), but in some instances the glaze was possibly originally green that has changed to black; as inlay from El-'Amarnah (Eighteenth Dynasty) and Kaṇṭīr (Nineteenth to Twentieth Dynasty) and in plaques from the palace of Ramesses III at Medīnet Habu (Twentieth Dynasty). In the specimens

¹ G. A. Reisner, *Excavations at Kerma*, iv-v, 134-75.

² M. Hamza, *loc. cit.*

³ Found by Mr. Guy Brunton (not yet all published), and examined by the writer. These are exclusive of the beads of black, glassy material described by H. C. Beck in G. Brunton, *Qau and Badari*, II, 23, 24.

examined (other than the beads, where the core was white) the core was either dark grey or dark brown, and consisted of the usual powdered quartz, coloured by means of oxide of iron. It is most probable that the oxide of iron was added intentionally, and, therefore, that the material is a definite variant.

Red Faience (Variant C)

Very occasionally red faience is merely ordinary faience having a red glaze on a white, or almost white, body, but only two specimens of this, both of Eighteenth Dynasty date from El-'Amarnah, have been seen by the writer. Usually red faience is a definite variant, the body material being red and the glaze sometimes red and sometimes having very little colour.

Petrie states that 'Red varying between red brick and maroon belongs to Akhenaten and is seldom, if ever, found in the Ramesside and later times'.¹ Since this was written, however, much more red faience has been found, but so far as the writer knows, there is none before the Eighteenth or after the Twentieth Dynasty. From the Eighteenth Dynasty red faience occurs as beads, necklace-pendants, and inlay, such necklace-pendants and inlay being very common from El-'Amarnah, and similar necklace-pendants having been found in the tomb of Tutankhamūn; from the Nineteenth Dynasty (reign of Ramesses II) and Twentieth Dynasty (reign of Ramesses III) red faience foundation deposits are known; during the Nineteenth and Twentieth Dynasties red faience was used for beads and also for inlay in the Ramesside palace at Qantir, and during the Twentieth Dynasty red faience inlay was employed in plaques in the palace of Ramesses III at Medinet Habu. Specimens of all of the above-mentioned objects in the Cairo Museum have been examined.

Several pieces of early dynastic faience in the Cairo Museum seem at first sight to have a red core with a blue or green glaze, but on further examination it is found that although the surface of the core of an old break is red or reddish, this coloration is only superficial, being apparently due to a surface oxidation of the iron compounds present, and that underneath the red the colour is brown, owing possibly to the use of a brown sand.

With regard to the composition of the red body material, Petrie says: '... for the red, a body mixed with haematite and covered with a transparent glaze.'² A number of specimens have been analysed, all of which consisted of a very fine, red, gritty powder, which proved to be powdered quartz, coloured by means of red oxide of iron, and from a comparison of specimens of red quartz sand powdered to the same degree of fineness and examined both microscopically and chemically side by side, it is practically certain that the red body material of the faience is not a natural red sand finely powdered (which would give a red quartz powder) but an artificial mixture of quartz and red ochre, or other form of iron oxide.

Red faience is quite distinct from the red glazed pottery of the Arab period (see p. 151).

Faience with Hard Blue or Green Body (Variant D)

This consists of a core of granular quartz, generally harder than that of ordinary faience and sometimes very hard, tinted blue or green and always coated with a definite and separate glaze of the same colour as the core, though usually of a lighter shade. At first sight the colour of the core might appear to have been caused by some of the glaze having accidentally penetrated the body-material, but against this there are two objections: first, that the glaze would probably have been too viscous to have penetrated³ and, second, that if

¹ Petrie, Burlington Fine Arts Club, *Exhibition of the Art of Ancient Egypt*, 1895, *Glass and Glazing*, p. xxviii.

² Petrie, *Arts and Crafts of Ancient Egypt* (1910), 118.

³ See Hv. 4370, p. 162, in which case there has been penetration, evidence of which remains: see also p. 155, where penetration of glaze also certainly occurred.

there had been any such penetration, it would have been greatest near the surface and would have progressively diminished towards the centre, whereas there is no such gradation of tint, which is generally uniform throughout, though occasionally there are tiny particles of darker-coloured blue or green material, looking like glaze, scattered through the core. Franchet mentions this and says 'que c'est, parfois, la glaçure bleue qui a été utilisée et on en distingue facilement les grains dans la masse de la pâte'. It seems likely, therefore, that a little finely powdered glaze, or a powdered mixture of the glaze materials, was deliberately mixed with the quartz, in order to make the fused object harder. Franchet makes a similar suggestion, and says that to overcome the fragility of ordinary faience glaze was mixed with the quartz of the body.¹ Although any admixed glaze would also act as a binder, it could only function in this capacity after the firing, and in the case of non-moulded objects the usual adhesive would still be required in order to enable the material to be shaped and glazed. Another possibility is that specimens of faience, accidentally damaged during making, or imperfect from other causes, may have been ground up, body and glaze together, to make a new body material. This variant of faience is generally attributed to the Twenty-sixth Dynasty but is probably as early as the Twentieth Dynasty. In addition to the examination of a large number of specimens with a lens, twelve examples have been examined microscopically.

Several analyses of what, from the description and from the results obtained, are almost certainly this material may be given:

	1 %	2 %	3 %	4 %
Silica	94.4	92.3	93.9	95.3
Alumina	2.4	1.1	1.0	1.6
Oxide of iron	0.2	0.3	0.1	0.4
Lime	1.3	0.6	1.7	1.7
Magnesia . . . . .	...	...	...	...
Alkalies ^a	1.2	2.5	2.4	0.6
Oxide of copper ^b	0.5	0.8	0.8	0.4
Oxide of manganese . . . . .	...	2.4	...	...
	100.0	100.0	99.9	100.0

No. 1. Saqqārah: Saite period.

No. 2. Thebes: XXth Dynasty.

No. 3. Saqqārah: Saite period.

No. 4. Saqqārah: Ptolemaic period.

Analyses by H. Le Chatelier, *Comptes rendus*, 1889, 129 (12), 477-80; quoted by J. Llorens I. Artigas, *Les pastes ceramiques i els esmalts blaus de l'antic Egipte*, Barcelona, 1922.

(a) In an abstract of Le Chatelier's paper in *Journ. Soc. Chem. Industry*, 1899, 1020, the alkali is called soda.

(b) The presence of oxide of copper indicates that these materials were coloured with a copper compound and, therefore, were almost certainly faience with a hard blue core, that is to say, Variant D.

Glassy Faience (Variant E)

A further step in the evolution of faience resulted in the production of a material which, although manifestly derived from the variant of faience just considered (Variant D), does not come within the definition of faience given and, therefore, strictly speaking, is not faience at all, since it does not consist of a body material coated with a separate glaze, but is entirely homogeneous in composition throughout, without any separate coating of glaze.²

¹ L. Franchet (a) *Rapport sur une mission en Crète et en Égypte*, 116; (b) *Céramique primitive*, 42, 101.

² Sometimes it is very difficult to be certain whether there is a thin separate glaze or not and to know into which class, Variant D or Variant E, to place a particular specimen.

though the outside is generally, but not always, glossy. This also is attributed to the Twenty-sixth Dynasty. Thus Petrie says: 'In the XXVIth dynasty there is a beautiful hard stoneware, apparently made by mixing some glaze with the body, enough to fuse it together into a solid mass throughout.'¹

An analysis of what, from the description, appears to be this material may be given:

	%
Silica	88.6
Alumina	1.4
Oxide of iron	0.4
Lime	2.1
Soda	5.8
Copper oxide	1.7
	<hr/> 100.0

Analysis by H. Le Chatelier, *Comptes rendus*, 1899, 129 (7), pp. 387-8; quoted in *Journ. Soc. Chem. Industry*, 1899, 917.

In the English translation the specimen is stated to be a funeral statuette, and the material hard, translucent, of a pale blue colour and undoubtedly porcelain.

As may be seen from the following tabular statement, beginning with ordinary faience, passing to the Variant D, then to the phase called by the writer Variant E, and finally to ordinary glass, the proportion of silica gradually becomes less, while that of the alkalis increases. The figures are:

	1 <i>Ordinary Faience</i> %	2 <i>Variant D</i> %	3 <i>Variant E</i> %	4 <i>Glass</i> %	5 <i>Glass</i> %
Silica	95.2	94.0	88.6	62.2	60.9
Alkalies	0.3	1.7	5.8	19.9	28.7

No. 1. Mean of 6 analyses (see p. 77).

No. 2. Mean of 4 analyses p. 81.

No. 3. Analysis above on this page.

No. 4. Mean of 24 analyses: see my *Ancient Egyptian Materials and Industries*, 421.

No. 5. Mean of 13 analyses: see *op. cit.*, 419.

A number of specimens of this material have been examined. Under the microscope it is seen to be very granular and to consist of what, for want of a better term, may be called imperfect glass, that is glass in which there is too small a proportion of alkali to combine with all the quartz, so that on firing there has been incomplete fusion, with the result that a considerable proportion of the quartz grains remain uncombined and embedded in a matrix of glass.

Since this material is certainly not faience, and is equally certainly a kind of glass, though not normal glass, to call it 'glassy faience' or 'imperfect glass' seems to describe its nature and composition better than any other name that has been suggested.

Faience Variant F

Egyptian faience consists, as already shown, of a powdered quartz base coated with an alkaline glaze, and this continued to be made certainly as late as the fourteenth or fifteenth

¹ Petrie, *op. cit.*, 116.

century A.D. (see p. 150). At a late period, the exact date of which is not certain, but is probably about the Twenty-second Dynasty (see p. 150), a new glaze was introduced, which contained a lead compound and which was occasionally applied to a powdered quartz base, and for a considerable period the two different glazes were used concurrently, both on a powdered quartz base, the older alkaline glaze, however, being by far the commoner of the two. At a later date the alkaline glaze was also occasionally employed on a very siliceous pottery base, that is to say on a base of burnt clay ware containing a large proportion of quartz, and lead glaze was commonly used on ordinary pottery (ordinary burnt clay ware).

Thus there were three different bases, namely powdered quartz, highly siliceous clay, and ordinary clay, and two glazes, an alkaline glaze and a lead glaze. Five different combinations of these are possible and were made, namely (a) an alkaline glaze on powdered quartz, that is to say ordinary faience; (b) an alkaline glaze on highly siliceous burnt clay ware (glazed siliceous pottery), which does not come within the definition of faience and will be considered later; (c) a lead glaze on powdered quartz, which is a variant of faience (Variant F), and will now be described; (d) a lead glaze on highly siliceous burnt clay ware (glazed siliceous pottery) and (e) a lead glaze on ordinary burnt clay ware (glazed pottery). An alkaline glaze was not employed on ordinary burnt clay ware because, as explained by Burton,¹ 'Such glazes are very uncertain in use, and can only be applied to pottery unusually rich in silica (i.e. deficient in clay). Consequently these alkaline glazes cannot be used on ordinary clay wares, and when they have been used successfully, the clay has always been coated with a surface layer of highly siliceous substance (e.g. the so-called Persian, Rhodian, Syrian, and Egyptian pottery of the early Middle Ages).' A lead glaze, on the other hand, is very satisfactory on ordinary burnt clay ware (pottery).

As to the date of the first use of a lead glaze on any base there is a considerable difference of opinion. Thus Burton states that 'The fact that glazes containing lead oxide would adhere to ordinary pottery when alkaline glazes would not was discovered at a very early period, for lead glazes were extensively used in Egypt and the nearer East in Ptolemaic times, and it is significant that, though the Romans made singularly little use of glazes of any kind, the pottery that succeeded theirs, either in western Europe or in the Byzantine empire, was generally covered with glazes rich in lead.'¹ Petrie² says: '... lead is essential with iron for the Ptolemaic apple-green.' R. L. Hobson states³ that 'Lead glaze has been freely used on late Roman pottery.' Dalton states that 'Pottery with a lead glaze is thought to have been first made in the first century B.C., when it appears on various sites at Alexandria, Tarsus in Asia Minor and in the Allier district of Gaul'.⁴ Walters says: 'In the first century B.C. a new development may be observed in the introduction of a metallic, probably leaden, glaze used for coating clay objects in place of a slip or alkaline glaze'.⁵ Harrison states that 'The first really satisfactory surface glass for use in pottery was what is called a lead glaze, known in Mesopotamia at any rate as early as 600 B.C.'.⁶ Sidney Smith illustrates 'Glazed ware of Babylonia and Assyria in the period 1000-600 B.C.',⁷ but neither the nature of the body material, nor of the glaze, is given.

¹ *Ency. Brit.* 13th ed., v, Article *Ceramics*, 706.

² *Ancient Egypt*, 1923, 23 (Review).

³ *Guide to the Islamic Pottery of the Near East*, British Museum (1932), p. xv.

⁴ O. M. Dalton, *Byzantine Art and Archaeology* (1911), 608.

⁵ H. B. Walters, *Catalogue of Roman Pottery in the British Museum* (1908), p. xi.

⁶ H. S. Harrison, *Pots and Pans* 52-3.

⁷ *Early History of Assyria*, Pl. xv.

Unfortunately, owing to the confusion created by the use of 'pottery' for faience and also of 'faience' for pottery, it is sometimes impossible to know whether the material is really pottery or faience, as the case may be, especially for Islamic wares, since during the Arab period the two kinds of ware overlap one another. The writer has tested the glaze of a number of *faience* objects of different dates for lead, with the following results:

	Number tested	Alk. Glaze	Lead Glaze
IIIrd to XXIst Dynasties inclusive .	8	8	0
XXIIInd to XXXth Dynasties inclusive .	4	1	3 ^a
Ptolemaic and Roman periods .	33	29	4 ^b
Date unknown, but before Arab period .	19	16	3 ^c
Arab period	7 ^d	4 ^e	3 ^f
	71	58	13

(a) One was a ram-headed bird amulet (Cairo Museum No. J. 56317) of XXIIInd Dynasty date: another was a small statuette of a dwarf Ptah-Seker (Cairo Museum No. J. 54413) of the period XXIIInd to XXVth Dynasties: a third was an inscribed vase (Cairo Museum No. J. 55621) of the Saite period. Two were green and one bluish-green.

(b) One was dated by Mr. O. Guéraud to the 3rd cent. B.C. (F. W. von Bissing, *Fayencefâsse*, *Cat. Gén. du Musée du Caire*, No. 18026). The proportion of lead was small. The exact dates of the others are unknown; all were green.

(c) The glaze was green in two cases and blue in one case.

(d) For three of these specimens the writer is indebted to Hussein Effendi Rashed, Curator of the Museum of Arab Art, Cairo, who was good enough to date all seven specimens.

(e) One 13th cent. A.D., one 14th cent. A.D.; two 14th-15th cents. A.D.

(f) Two 11th-12th cents. A.D.; one 14th-15th cents. A.D.

The thirteen specimens with a lead glaze, therefore, were faience, Variant F, the rest being ordinary faience; the one of the Twenty-second Dynasty (945-745 B.C.) is the earliest example of *faience* with a lead glaze known to the writer.

The test for lead was the ordinary one with potassium iodide, with which soluble lead compounds give a canary-yellow precipitate of lead iodide, the glaze being first treated with a drop of hydrofluoric acid. The technique of the test was that suggested by E. S. Hawkins and described and used by MacAlister,¹ who says: 'The test is extremely sensitive and beautiful and can be used on specimens without damage being done'.

C. GLAZED SOLID QUARTZ

The objects of glazed solid quartz were mostly small, such as amulets, beads, and pendants, though a few larger objects of this material are known, for example, part of a boat, which must have been about two feet long, but which was made in several sections, a sphinx, and part of a lion.² The quartz used was both quartz rock and rock crystal, and the glaze was an alkaline one. This material continued in use certainly as late as the Twelfth Dynasty.³

¹ D. A. MacAlister, *The Material of the English Frit Porcelain*: VI, *Lead Oxide as a Factor in Classification*, in *The Burlington Magazine* 54 (1929), 192-9.

² Petrie, *Prehistoric Egypt* 42-3.

³ Petrie, *loc. cit.*; see also H. C. Beck, *Notes on Glazed Stones*, Part II, *Glazed Quartz*, in *Ancient Egypt and the East*, 1935, 19-30.

D. GLAZED POTTERY¹

The glaze from a number of specimens of Islamic pottery of Egyptian origin² was tested with the following results:

	<i>Number tested</i>	<i>Alk. Glaze</i>	<i>Lead Glaze</i>
Red pottery	15	0	15
Buff and light-brown pottery ^a	18	0	18
Very siliceous pottery ^b	2	2 ^c	0
	35	2	33

(a) Twelve are siliceous and several very siliceous.

(b) One reddish, one buff.

(c) In one of these specimens the glaze has almost entirely disappeared, and the adhesion, therefore, can never have been good. Both are 14th to 15th centuries A.D.

The glaze from two specimens of Islamic ware from Fustât has been analysed with the following results:

	<i>1</i> %	<i>2</i> %
Silica	47.5	74.0
Alumina	1.0	1.5
Oxide of iron	2.1	2.6
Lime	6.1	2.4
Magnesia	0.7	0.8
Potash	tr.	2.7
Soda	6.2	14.1
Oxide of tin	4.8	0.3
Oxide of lead	31.4	1.4
Oxide of manganese	0.2	0.2
	100.0	100.0

Analyses by J. Clifford, F.I.C., in the writer's laboratory. Glaze No. 2 was originally stated to be a salt glaze (*Ancient Egyptian Materials and Industries*, 418), but it is now believed to be an alkaline glaze containing a very small proportion of oxide of lead.

Slip

A slip³ on glazed pottery is a thin layer of a light-coloured clay sometimes applied to the body material before glazing in order either to mask the colour of the body, so that the glaze shall have its full colour effect, or to give a better adhesion to the glaze, in which latter case the slip is very siliceous. In part, and generally in large part, the function of the slip

¹ Glazed pottery is only considered in connexion with the occasional late use on very siliceous pottery of an alkaline glaze similar to that employed for faience and the general use of a lead glaze. Lustre ware is intentionally omitted as being outside the scope of the present article.

² This pottery, which ranges in date from the 9th cent. A.D. to the 14th-15th cents. A.D., was kindly dated by Hussein Effendi Rashed, Curator of the Museum of Arab Art, Cairo, who supplied six of the specimens.

³ French *engobe*.

is analogous to that of the special layer applied to faience. A number of specimens of glazed pottery of the Arab period were examined for slip, with the following results:

	<i>Number examined</i>	<i>Slip</i>	<i>No Slip</i>
Red pottery	15	5	10
Buff and light-brown pottery	20	0	20
	35	5	30

ORIGIN OF GLAZING IN ANCIENT EGYPT

There can be little doubt that glaze was first produced by accident. A number of suggestions have been made to account for the discovery, three of which may be quoted. Petrie says¹ that it 'was invented from finding quartz pebbles fluxed by wood ashes in a hot fire', which evidently means that glaze was produced accidentally on quartz pebbles by means of the alkali from the ashes of a wood fire, and that this glaze was copied intentionally. Another suggestion, probably also Petrie's,² is that 'it seems likely that glazing was developed in the course of copper smelting. The wood ashes of fuel would give the alkali, and lime and silica would be in the copper ore. Such a coloured slag or a glass run from it on to the pebble floor of the furnace, would then be the starting point for artificial imitations.' Elliot Smith suggests³ that 'smelters who were extracting copper discovered in the slag of their furnaces the secret of how to make glazes for pottery . . .'.

All trees and plants contain mineral matter, which is left in the form of ashes when the material is burned, and all such ashes contain alkali. In the case of trees and most land plants, this alkali consists largely of potassium carbonate, the ashes of herbs and grasses generally being richer in this constituent than the ashes of trees and bushes. In the case of certain plants growing on or near the seashore, or near salt lakes, the alkali, instead of being largely potassium carbonate, is principally sodium carbonate. The alkali, whether potassium or sodium carbonate, is never pure, but is always associated with potassium or sodium chloride and sulphate and calcium carbonate, together with small proportions of phosphates, silicates, magnesium carbonate, and oxide of iron.

A number of experiments were made with two lots of ashes from different sources, obtained by burning ordinary garden refuse. A little of the ash was placed on each of a number of large flat quartz pebbles, which were then strongly heated for about an hour in a small electric muffle furnace giving a nominal temperature of about 1000° C. (1832° F.) and in some cases the pebbles were heated a second and even a third time, again for about an hour each time. Quartz sand was also covered with the ashes and strongly heated for about an hour. With one lot of ashes there was not any glaze whatever, either on the pebbles or on the sand, but with the other lot of ashes there were traces of a dark grey glaze on the pebbles, but none on the sand, the dark colour being due to particles of carbon from the ash having become entangled in the fused alkali. Although small variations in the results were obtained with plant ashes from two different sources, and therefore further slight variations might be expected with other ashes, it seems unlikely that any very marked glaze could be obtained in this manner, and still more unlikely that it could be obtained with the ashes from wood fires, since these, as already stated, contain less alkali than plant ashes. Even if it be assumed that fires were made continuously on the same spot for weeks,

¹ *Arts and Crafts of Ancient Egypt* (1910), 107.

² Anonymous review in *Ancient Egypt*, 1914, 188.

³ *In the Beginning*, 58.

or months, or even years together—not entirely an unreasonable supposition in certain cases—any glaze formed would have been dark-coloured and neither very noticeable nor very attractive. The first hypothesis, therefore, fails when tested experimentally, and it fails doubly because it also does not explain the production of the blue colour of the earliest glaze, which is due to a copper compound.

The second hypothesis is equally unsatisfactory; it assumes that the floor of a primitive copper-smelting-furnace was accidentally covered with, or intentionally composed of, quartz pebbles, for which there is neither evidence nor probability, and also, either that copper slag may be blue, which it is not, or that a blue-coloured glass might run from it, which I believe to be impossible, since the amount of alkali present from the ashes of the fuel would be quite inadequate, as is proved by the experiments already described. Also, as already shown, any glaze formed would have been a potash glaze and not a soda glaze, whereas the earliest glaze, so far as is known, is a soda glaze (see p. 144).

The third hypothesis is very vague, wholly unconvincing, and not supported by any evidence or experimental data.

Also none of the hypotheses explain the production of glazed powdered quartz (faience), or of glazed steatite, both of which, on present evidence, were earlier than glazed solid quartz.

Since, so far as is known, the earliest glaze was not a colourless one that later developed into blue, but was blue from the first, the problem to be solved is the manner in which an accidental blue glaze that was easily noticeable and sufficiently desirable to be copied, could have been produced.

As Professor Hocart says with reference to glass: 'It is impossible to profit by a lucky accident unless the mind has been prepared by a long course of thinking and experimenting.'¹ The state of mind, however, that could have led to the copying of an accidental blue glaze probably existed, namely the desire to possess blue beads, beads in themselves being highly desirable, as they were supposed to possess amuletic or magical properties, and blue beads being particularly desirable, as their colour had a special value. Since the only Egyptian stones that could have been made into blue beads were turquoise, which was rare and expensive, and azurite, a blue ore of copper, which was also rare, not generally known, and not suited to carving, and since the imported lapis lazuli was also rare and costly, the only alternative was an artificial blue material; hence any blue glaze produced accidentally on a stone would, sooner or later, have been noticed and copied. The essential factors for the production of such a glaze were an alkali, copper or a copper compound, a stone to form a base for the glaze, and a fire. Since, as already shown, any glaze formed on quartz pebbles from the alkali in the ashes of a fire of wood or ordinary plants would have been negligible in amount, would not have been blue, and would have been a potash and not a soda glaze, this source of alkali may be ruled out. If so, then the alkali must have been either that from special plants growing on or near the sea-shore, or near a salt lake, or else natron.

The possibility of the use of plant ashes of a particular kind containing a high proportion of alkali in the form of sodium carbonate cannot be ignored, since an ash containing sodium carbonate obtained from special plants grown in certain localities bordering the Mediterranean, chiefly Spain, but also Sicily, Sardinia, and the Levant, was formerly in general use for glass-making, the material from Spain being called *Barilla* and that from the Levant *Roquette*, and such plant ashes were at one time produced in Egypt for this purpose. Thus in 1610 G. Sandys, when passing through the desert between Alexandria and Rosetta saw² 'here and there a few unhusbanded Palmes, Capers, and a weed called Kall³ by the

¹ A. M. Hocart, *The Progress of Man*, 49.

² *Sandys Travells* (1670), 6th ed., 90.

³ Kali is probably meant.

Arabs. This they use for fuel and then collect the ashes which crushed together they sell in great quantity to the Venetians; who equally mixing the same with the stones that are brought them from Pavia, by the river of Ticinum, make thereof their crystalline glasses.'

Natron is a naturally occurring compound of sodium carbonate and sodium bicarbonate, which in Egypt always contains sodium chloride (common salt) and sodium sulphate as impurities; it is found plentifully in the country, chiefly in three localities, namely, the Wādī el-Naṭrūn, and the Beḥērah province in Lower Egypt, and El-Kāb in Upper Egypt, the first and third of these being known and worked anciently.

Since the earliest glaze was of Badarian date on steatite, the next in chronological order being of early predynastic date (S.D. 31) on powdered quartz, and the third, of middle predynastic date (S.D. 48) on solid quartz, and since the alkali must have been either from special plant ashes or from natron, the problem can be narrowed down to (a) the manner in which a blue glaze was formed accidentally at a period when copper smelting and copper working were in their infancy, but when malachite was well known and largely used as an eye-paint, and was therefore probably the source of the blue colour, and (b) to a district either on or near the sea-shore, or near a salt lake or natron deposit, or else to a place where special plant ashes or natron were being employed. Malachite, before being used as an eye-paint, was finely ground on hard stones, often quartz¹ or quartzite,² the grinding surface of which became coloured green in the process. In the presence of a little alkali, and if strongly heated, such grinding-stones would have become coated with a blue glaze. This has been proved by a number of experiments, a little malachite being rubbed on quartz pebbles, then a little powdered natron put on, and the pebbles strongly heated, when they became coated with a good blue glaze every time. But what was the source of the alkali? It seems possible that the fused ashes of special plants, or natron, might have been employed for some such purpose as washing clothes or the person, and that this alkali might have been broken up for use on the same stones that had been employed for grinding malachite, and the stones afterwards strongly heated, for instance for putting into pots to boil water, or used to form a fireplace, or employed in some other manner in connexion with fire. In any case, whatever happened, it must have been something simple and something that occurred many times, since one occurrence would not have been enough for the glaze to be noticed and copied.

METHOD OF MAKING GLAZE

The essential ingredients of the ancient Egyptian blue glaze were an alkali, a very small proportion of a copper compound for colouring purposes, a little calcium carbonate (a trace of 'calcium' is given in a partial analysis of a predynastic glaze (see p. 144) and 3.8% of 'lime' in a glaze of Roman date (see p. 144); both of these being almost certainly present originally as calcium carbonate, which became converted into calcium silicate during heating), and a large proportion of silica. Since both powdered quartz and solid quartz are forms of silica, and since at a high temperature silica acts like an acid and attacks and combines with such substances as sodium carbonate, potassium carbonate, and calcium carbonate, it seemed likely that no further silica would be required. A little silica might also be present in the alkali, since plant ashes contain this ingredient, as do also the poorer qualities of natron; for example four specimens of natron analysed contained respectively 2.2%, 6.7%, 7.6%,³ and 9.6%⁴ of quartz sand. Also, since both plant ashes and natron

¹ G. Brunton and G. Caton-Thompson, *The Badarian Civilisation*, 112.

² G. Brunton, *Qau and Badari* I, 62.

³ Contained also a little clay.

⁴ Largely, but possibly not entirely, quartz sand.

contain a small proportion of calcium carbonate (the four specimens of natron already referred to containing 0.9%, 1.8%, 1.4%, and 1.2% respectively), and since even quartz contains a very small proportion (a white quartz pebble analysed containing 0.2%), it was highly probable that no additional calcium carbonate would be needed. Experiments, therefore, were made with only alkali and malachite, and it was found that by strongly heating either potassium carbonate (the principal constituent of wood and ordinary plant ashes) or powdered natron, mixed with a small proportion of finely powdered malachite, on quartz pebbles, a beautiful blue glaze was obtained every time. The reaction was not merely a fusing of the alkali and its coloration by means of the malachite, but the quartz was attacked by the alkali and, when the glaze was dissolved off, the surface of the pebbles was found to be much roughened underneath, the alkali having manifestly combined with some of the quartz, forming potassium or sodium silicate according to the nature of the alkali used. This has been noticed by Petrie, who says:¹ 'The fusion of the glaze on the stone partly dissolves the surface; and even after the glaze has been lost, its effect can be seen by the surface having the appearance of water-worn marble or sugar candy'.

In order to make quite sure that the addition of silica or calcium carbonate was not necessary, a number of experiments were made by adding various proportions of finely powdered limestone to the alkali and malachite mixture, and other experiments were made with both finely powdered limestone and finely powdered quartz, but there did not appear to be any advantage, and there was a serious disadvantage in that the additions—as was only to be expected—made the fusion more difficult, with the result, either that no glaze whatever was formed, or that any glaze produced was poor.

Solid quartz having been successfully glazed, experiments were made with a view to glazing the powdered quartz base used for faience.² This, however, was found to be more difficult, and when the alkali and malachite mixture was applied directly to the moulded material the glaze was never good and often very poor and sometimes there was none at all, the glazing mixture sinking into the quartz and colouring it blue. At first it was thought that the unsatisfactory results might be due to the heat employed having been too strong, or to the quartz not having been powdered finely enough, and so the experiments were repeated at a lower temperature and with a much finer and therefore denser quartz powder; but the results were only very slightly better. Eventually, however, a good glaze was obtained by first glazing solid quartz, then chipping off the glaze and powdering it finely, and finally covering the moulded powdered-quartz object with the fine powder and heating. It is not suggested that this was precisely the method employed anciently, but it seems probable that the glaze mixture was first fused in some manner and then powdered and used. Thus in describing an imperfectly glazed object Quibell says: 'a patch . . . is covered, not with smooth glaze like the rest of the figure, but with minute grains of blue frit, this must be due to imperfect firing and shows that the glaze was applied as a wash of ground frit. The same method is seen in the ushabtis of a far later period.'³ Beek, as the result of his microscopical examination of Egyptian glazed objects, states that: 'All the specimens from Egypt, except a few which I believe to have been imported, appear to have had an already made glaze or else the ingredients to make a glaze powdered up and applied to the surface, and then to have been fused'.⁴

The modern method of glazing is first to make the glaze, when it not only looks like lumps of glass, but really is glass, though called 'frit', next to powder it very finely and mix the powder with water to the consistency of thin mud, which is kept stirred to prevent the

¹ Petrie, *loc. cit.*

² For the method of making this see p. 158.

³ J. E. Quibell, *The Ramesseum*, 3.

⁴ *Op. cit.*, 21.

powder separating out, and then either to dip the objects in the 'mud' or to run the liquid 'mud' over the surface, the objects being afterwards dried and fired. A similar process on a small scale is used by several of the modern forgers of faience at Kurnah. One particular forger seen by the writer buys small Venetian blue glass beads, powders them very finely, adds a little water, and to the 'mud' formed then adds rock salt, which is done by leaving lumps of rock salt to dissolve slowly. The object to be glazed is dipped in the 'mud', dried and fired, the crystallization of the salt on drying and before firing aiding the adhesion of the powdered glaze until it is fired.

A few experiments were made with a view to glazing steatite, using the alkali and malachite mixture. Although the results were not very satisfactory, a glaze was obtained in several instances, though it was always green and not blue; whether this was due to the presence of iron compounds in the steatite, or to too high a temperature, was not determined.

It may be pointed out that whatever the precise details of the ancient method of glazing were, there can be little doubt that the firing was carried out in a closed chamber of some sort, though probably only a small one, since it seems impossible that this should have been done in an open fire with the objects to be glazed in contact with the fuel. The modern forgers of faience at Kurnah have evolved various ways of solving the difficulty: sometimes an earthenware pot is employed, sometimes a copper box, and sometimes a box of steatite, the objects in the latter case being stood on cubes of steatite.¹

BINDING MEDIUM FOR BODY

An important matter in connexion with faience is the manner in which the body material, which when dry has no coherence whatever, was held together while being shaped and glazed. That some binding substance was used in small amount seems incontrovertible. This is frequently stated to have been clay, though lime, silicate of soda, and organic materials, such as oil, fat, gum, or glue have all been suggested. These will now be considered, and it will be shown that some of them are impossible and others unlikely, and that the binding material employed was almost certainly an alkali (probably natron), or salt.

Clay

The microscopic examination does not show the presence of any extraneous or added material of any kind, and although the chemical analysis gives 1.3% of alumina as the mean of four specimens (see p. 143), this, in the form of clay, would not be nearly sufficient to render the quartz powder plastic, and it is almost certainly merely an impurity present in the quartz, alkali or salt used, or picked up during the grinding or manipulation, as are also the oxide of iron, the lime, and the magnesia found on analysis. With respect to clay, Burton says:² 'After having tried many mixtures of the kind indicated by these analyses, I have been forced to the conclusion that the small amount of clay indicated by the percentage of alumina found would be entirely insufficient to give a material that could be shaped by pottery methods . . .' and of an Eighteenth Dynasty *shawabti*-figure he examined he says³ that there was 'no trace of any clay substance'.

¹ Kindly communicated by Ahmed Eff. Fakhry, Inspector, Department of Antiquities, Luxor. The writer was shown only the copper box.

² *Op. cit.*, 595. Mr. Burton was closely connected with the ceramic industry.

³ *Op. cit.*, 596.

Lime

The use of lime has been suggested by Beck, who says:¹ 'The core appears to be very nearly pure silica, has much the chemical composition of a silica brick, and is probably made in somewhat the same way. If powdered quartz crystals were mixed with about 2 per cent. of lime and then heated in a furnace, a vitreous mixture would be formed which would cement the whole together, and it has been found in practice that this amount of lime, when added in the form of milk of lime, is sufficient to bind the dried material together before firing. . . . The analysis is practically the same as that given by Burton for Egyptian faience. I have examined some . . . sections of silica brick, and find that under certain conditions the quartz breaks and fuses in a manner extraordinarily similar to the faience. . . . One of the difficulties of this suggestion is that the lime and quartz would probably not fuse at a lower temperature than about 1,100° centigrade.' Beck also says: 'As the base of Egyptian faience consists of quartz grains fused together with a little lime . . .'²

In addition to the difficulty to which Beck draws attention, namely the very high temperature required to fuse a mixture of carbonate of lime and quartz, there are other difficulties; for example, in the case of sand-lime bricks it is slaked lime and not carbonate of lime that is used, and, as explained elsewhere,³ there is no evidence that the Egyptians knew of lime before the Ptolemaic period; also when a sand-lime brick is examined it is seen that each grain of sand is surrounded by a thin film (probably consisting of silicate of lime), which is not the case with faience, the appearance of the two being totally different, and for the manufacture of sand-lime bricks a very considerable pressure (about 6 tons per square inch) is necessary for the moulding, after which a treatment with steam under pressure (120 to 200 pounds per square inch) in an autoclave is required, all of which would have been impossible in ancient Egypt.

A number of experiments were made by the present writer, using both milk of lime (*i.e.* slaked lime and water) and powdered quicklime in varying proportions, ranging from 2% to 50%, the mixture being heated to the highest temperature available, about 1000° C. In no case was there any cohesion or fusion, the mixture remaining in the original condition of a powder, though doubtless there would have been fusion at a still higher temperature.

Silicate of Soda

This is suggested by Sana Ullah of the Indian Archaeological Survey,⁴ who says that 'possibly silicate of soda . . . was employed' for the flux. As will be shown, silicate of soda was the flux, but it was not used in that form, nor was it known to the ancients as a separate substance. The material employed was most probably natron or chloride of sodium (common salt), which produces silicate of sodium when heated with the quartz powder.

Organic Materials

With respect to the use of organic materials, such as oil, fat, gum, or glue, the writer thought at one time that there was possibly a small amount of evidence for their use, though this 'was too slight to be in any way conclusive'.⁵ Thus in several instances, specimens of faience examined have shown a few small particles of black organic matter distri-

¹ H. C. Beck, Report on Qau and Badari Beads, in *Qau and Badari*, II (G. Brunton); also in Appendix I of *The Zimbabue Culture* (G. Caton-Thompson). Mr. Beck has informed the writer that carbonate of lime and not quicklime or slaked lime is meant.

² *Notes on Glazed Stones*, Part II, *Glazed Quartz*, 23.

³ A. Lucas, *op. cit.*, 73.

⁴ In Sir John Marshall, *Mohenjo-daro and the Indus Civilization*, II, 687.

⁵ A. Lucas, *Ancient Egyptian Materials*, 1926, 34-5.

buted throughout the mass that conceivably might have been the remains of some such adhesive, and in a large number of specimens from the Twenty-sixth Dynasty, constituting one lot of *shasabti* figures, the body material showed an inner grey-coloured core surrounded by a zone of white. Under the microscope the grey core was seen to contain numbers of black particles, which were probably charred organic matter, and, on being strongly heated, this core became definitely lighter-coloured, though not white. It was suggested, therefore, that some organic adhesive might have been used for binding the quartz together, and that the dark centre was due to this not having been completely burned away; but it is equally possible that the white outer layer was intentional and was the 'special' layer already described (see p. 145), put on in order to prevent the dark grey of the body from affecting the colour of the glaze, and that the grey may have been due to organic matter (accidentally present as an impurity, either in the quartz or in the natron) having been charred, but not burned out.

In order to test the value of organic materials as binders for quartz powder, a number of experiments were made with gum and oil, both of which formed with the quartz a paste that could be moulded and modelled. The objects made with gum could not be removed from the moulds either when dry, when they were firmly cemented in, or after firing, as they were then too friable, and if modelled and fired, the gum burned out leaving the objects so friable and fragile that it was impossible to handle them for glazing without breaking. The objects made with oil naturally did not dry, and therefore could not be removed from the moulds, and, whether moulded or modelled, after firing they were like those made with gum, so fragile that they could not be handled. Burton states:¹ 'I have with considerable difficulty succeeded in making a few small glazed figures by this method, they are softer and more rotten in body than any Egyptian glazed objects I have ever handled'.

Alkalies

The only alkalies known to the ancient Egyptians were (a) impure potassium or sodium carbonate in the form of plant ashes, and (b) sodium carbonate and bicarbonate in the form of natron; a simple addition of any of these would have been useless, as none of them is an adhesive. As, however, both potassium and sodium carbonate will combine chemically with quartz when strongly heated, forming potassium or sodium silicate, a large number of experiments were made with dry powdered natron and quartz powder, the latter obtained by grinding quartz pebbles very finely. The mixture was pressed with the fingers into small ancient faience moulds made of red pottery; these were heated in a small electric muffle furnace, the result being a coherent mass having varying degrees of hardness depending upon the proportion of natron present. With 2% of natron the mass was so friable that it could not be removed from the mould without breaking; with 5% of natron it approximated in friability to much of the ancient white faience body-substance; with 10% of natron it was slightly harder than ordinary faience, and with 20% it was much harder. The experiments were repeated several times with substantially the same results. Natron, therefore, in the form of dry powder, added in the proportion of from about 5% to about 10% is a very effective binding agent, and may have been the one employed anciently.

But although dry natron might have been employed for objects that were moulded, it certainly could not have been used for objects that were shaped by hand. Experiments were therefore made with natron solution, and it was found that on account of the extreme fineness of the quartz powder any solution, even plain water, conferred on it a slight degree

¹ *Op. cit.* 599.

of plasticity, and that with a strong natron solution the plasticity was sufficient for the quartz to be made into a paste that with care might be fashioned into rough shapes, which, on partial drying, could be further shaped with a pointed instrument, and which when quite dry could be handled without damage and hence could be baked and glazed.

But it may be asked, if such a substantial proportion of natron as 5 or 10% were used, why is it that it has hitherto escaped notice, and why is it not disclosed by chemical analysis? The reasons are briefly as follows: Natron consists essentially of sodium carbonate, sodium bicarbonate, and chemically combined water (water of crystallization), but it always contains both sodium chloride (common salt) and sodium sulphate and sometimes in considerable amount, the particular natron employed for many of the experiments containing 24% of the former and 10% of the latter. When natron is strongly heated with quartz, the sodium chloride largely disappears by volatilization; the sodium bicarbonate loses carbon dioxide and water and becomes converted into carbonate; the sodium carbonate (both that originally present and that formed from the bicarbonate) combines with some of the quartz, forming sodium silicate and carbon dioxide, which latter escapes, together with the water of crystallization and any moisture present. The total loss (sodium chloride; carbon dioxide; combined water and moisture, the escape of which would account for the air-holes in the finished product) would generally amount to more than 70% of the weight of natron used; thus for every 10 grammes of natron (supposing 10% were used) not more than about 3 grammes of material would be left combined with every 100 grammes of quartz. Considering the very minute amount of the specimen taken for microscopical examination, it is no wonder that such a small proportion of sodium silicate (which is without colour or other conspicuous characteristic) should escape notice. In the chemical analysis the silica part of the sodium silicate, which is derived from and is identical with the quartz, cannot be separated or distinguished from it; it is, therefore, necessarily reported with it, and any small proportion of sodium found is reported as 'sodium oxide' or 'alkali'.

The experiments referred to were made probably some time during 1931 or 1932, the results being communicated to and shown to friends at the time, but they were first published in 1933.¹ Recently the writer found that he had been forestalled some forty years ago, when analyses were made in the Museum of Practical Geology, London, which showed that the white body of faience was 'composed of fine sand cemented by silicate of soda. The soda was probably introduced in the form of carbonate (derived, perhaps from the Natron Lakes), and, having been mingled with the sand, the mixture was moulded, fired and glazed.'²

Salt (Sodium Chloride)

This, like natron, will act as a binder for the quartz powder, and it is used for this purpose by the modern forgers of faience at Kurnah. That it is incorporated into the glazing mixture has already been mentioned (see p. 156), but it is also used with the body-material. As the result of a number of experiments, the writer has found that when salt is mixed dry with powdered quartz, put into moulds and strongly heated, the greater part of the salt disappears by volatilization, but sufficient combines with the quartz (forming sodium silicate) to bind it together. Also, when a strong solution of salt is mixed in the right proportion with powdered quartz, this can be shaped by hand or by simple pottery methods, and when dried, the crystallization of the salt by holding the quartz powder together imparts to it sufficient

¹ A. Lucas, *Ancient Egyptian Materials and Industries about 1350 B.C.*, in *The Analyst*, 1933, 657.

² Anon., *Handbook to the Collection of British Pottery in the Museum of Practical Geology*, London (1893), 37-8.

solidity to enable the mass to be handled for glazing. After firing at a high temperature no evidence of salt can be found on analysis.

II. Glazed Ware in India

FAIENCE

Sir John Marshall writes:¹ 'Faience, which resembled the faience of Mesopotamia, Minoan Greece, and Egypt, but which has preserved its colours less brilliantly than in Egypt, was a soft and friable paste, sometimes made of powdered steatite,² usually white in colour and coated with a blue, green or white vitreous glaze'.

Dr. Mackay writes:³ 'Faience ware is found in both the Intermediate and Late levels at Mohenjo-daro and it will probably also be found in the Early levels when we get down to them'. Also he describes the body-material as 'white or greyish paste coated with a glaze. This paste is granular in appearance and sometimes contains black specks which may be the carbonized remains of an adhesive that it was sometimes found necessary to introduce to hold the paste together before it was dipped in or painted with the glaze and fired.'⁴ Faience was 'just as common' at Harappa as it was at Mohenjo-daro.⁵ In another place Dr. Mackay writes:⁶ 'True faience is also well known and consists of a base of powdered quartz mixed with some binding material, perhaps natron and coated with a glaze'.

Mr. Sana Ullah says⁷ that microscopic examination 'reveals a compact granular structure composed of granular quartz grains bound together with a transparent cement. Its chemical analysis shows also that silica is the chief constituent forming about 90 per cent. of the total amount. From these facts it may be inferred that the original paste was composed of finely crushed quartz or pure white sand, a glassy flux and a colouring matter if necessary.' He also says⁷ that for the flux 'possibly silicate of soda . . . was employed . . . and served to impart the desired property to the wet paste'. Further that 'The light red variety was prepared by the addition of red ochre to the raw paste'.⁸ Also 'The hollow objects were moulded on cores of sand, which was tied up in some fabric and raked out after firing. Impressions of the fabric, as well as remains of the sandy core, have been found in several specimens.'⁹

Mackay states that 'Another common material was a vitreous paste composed of quartz and a glaze mixed together and fired at a high temperature. This process results in a material with a firm smooth surface and interior, which though not possessing the glossy surface of faience, is stronger and more compact in every way¹⁰. . . At Mohenjo-daro it occurs as commonly as faience¹¹. . . In Egypt a very similar material to that found at Mohenjo-daro was commonly used in the twenty-sixth dynasty. . . . For the present therefore we may surmise that this vitreous paste was an Indian invention and that it very slowly spread from that country.'¹² Of one particular specimen Mackay writes: 'The outward resemblance of this fragment to an opaque glass is very close. . . . But the granular nature of its paste proves it definitely not to be glass.'¹² And again: ' . . . this material, which to the casual eye resembles an opaque glass . . .'¹³ Three analyses are given of this 'vitreous paste' and two

¹ *Mohenjo-daro and the Indus Civilisation*, I, 32.

² Powdered steatite is not faience, even if glazed.—A.L.

⁴ *Op. cit.*, 576-7.

⁵ *Op. cit.*, 580.

⁷ In Marshall, *op. cit.*, II, 686-7.

³ In Marshall, *op. cit.*, 365.

⁶ *The Indus Civilisation*, 169.

⁸ *Op. cit.*, 687.

⁹ In Marshall, *loc. cit.* Reisner found a similar condition at Kerma (G. A. Reisner, *Excavations at Kerma*, IV-V, 137-8).

¹⁰ *The Indus Civilisation*, 169.

¹¹ In Marshall, *op. cit.*, II, 582.

¹² In Marshall, *op. cit.*, II, 576.

¹³ In Marshall, *op. cit.*, II, 582.

further analyses of what is called 'faience', but which, judging from the composition, and particularly from the presence of oxide of copper, cannot be ordinary faience, and therefore most probably represents the same material as the other three, all of them being apparently what the present writer has called 'glassy faience (Variant E)' or 'imperfect glass' (see p. 147). The analyses are as follows:

	1 %	2 %	3 %	4 %	5 %
Silica	88.1	85.9	84.7	89.8	91.1
Alumina	3.2	6.7	6.3	3.9	2.4
Oxide of iron	1.8			0.9	1.2
Lime	1.3	1.7	1.4	0.9	1.3
Magnesia . . . .	...	0.4	tr.	tr.	tr.
Alkalies	5.0	3.7	5.5	4.1	2.1
Oxide of copper	0.5	0.5	1.0	0.5	2.0
Oxide of manganese . . . .	...	...	...	...	tr.
Loss on ignition . . . .	...	1.5	1.2	...	...
	99.9	100.4	100.1	100.1	100.1

From Marshall, *op. cit.*: Nos. 1, 2, p. 574; No. 3, p. 575; Nos. 4, 5, p. 689. The analyses are given to two places of decimals, but for comparison with the Egyptian material, the present writer has shown only one place.

Analyses Nos. 1, 4, 5 are by Sana Ullah; Nos. 2, 3 by Dr. Hamid. No. 1: in another place (p. 689) where the analysis is repeated, the alkali is given as soda 4.5% and potash 0.7%.

Dr. Mackay kindly supplied the writer with 23 specimens of what are marked 'Faience', the dates of which are stated to 'range from 2750 B.C. down to 3000 B.C. and perhaps earlier'. These have been examined with the following results:

Ordinary Faience

There is only one specimen (A. 65) of ordinary faience; it is a small curved fragment, probably part of a small vase. The body-material is finely powdered quartz, almost white in colour and fairly friable; the outside is covered with a very thin glaze, now white and slightly iridescent, ornamented with three narrow, raised, convex stripes of a light-brown colour, which, however, may have been black originally, since on two of them there are tiny black specks and patches and larger black patches on the third: the inner surface shows no signs of having been glazed.

Faience with Hard Blue or Green Body (Variant D)

There are three specimens, which are as follows:

Dk. 2668. This is a small, slightly curved fragment of what may have been a small vase: the body-material consists of hard, fine, granular quartz of a light-green colour, the outer surface of which is coated with a friable light-yellowish material ornamented with yellowish-brown lines, with here and there, especially on the lines, tiny particles of what looks like glaze. The whole of the outer coating is believed to be a decomposed glaze.¹ The inner surface is greenish, and shows no signs of having been glazed.

Dk. 2760 (a). This is a narrow tubular bead. The body-material is hard and of a bluish-green colour and consists essentially of fine granular quartz; on the outside there are the remains of a green glaze.

¹ See Hv. 5535; Dk. 2764; Dk. 2760 (b) and Dk. 2760 (c).

Hv. 4370. This is a small curved fragment of a small vase. The body-material was originally finely powdered, fairly friable, white quartz, but the greater part of it, except the extreme inner portion, is now hard and of a light-blue colour, the quartz apparently having been penetrated by the glaze from the outside, almost, though not quite, through to the inside surface. The outside is coated with a bluish-green glaze and the inside with patches of a greenish glaze.

Glassy Faience (Variant E)

There are eleven specimens, as under:¹

Ten of the specimens, being all except one (*Hv. 5535*), are alike, and consist of a hard, fine, granular, well-graded quartzose material of a uniform bluish-green colour throughout, with no separate glaze. In five cases the outer surface is definitely glossy, while in the other five the surface is matt, with some slight indication that it may have been glossy originally. The hardness of the material is about 5 on Mohs' scale² and it scratches glass; in one specimen (*Hv. 6130*) after treatment with hydrofluoric acid and evaporation to dryness, the residue amounted to 11.7%,³ 88.3% therefore being quartz, which disappeared in the form of volatile silicon fluoride.

Hv. 5535. This, which is a turquoise-blue colour and breaks with a slight conchoidal fracture, looks much more like glass than the other ten, and, although still granular, is markedly less so than the others; it is covered on both sides with a thin, light-yellow layer of granular material.⁴ The specific gravity is 2.55 and the hardness on Mohs' scale 6.5 to 7;² it scratches glass and is not scratched by steel; after treatment with hydrofluoric acid the residue was 8%,³ which means that 92% was quartz that disappeared as volatile silicon fluoride. When examined microscopically, the material is seen to consist of a compact mass of irregularly shaped grains of quartz cemented together with about 35% of glass matrix, that is to say it is an imperfect glass, as already described, and with additional alkali the material would have been a normal glass. The yellowish outer coating has a similar composition to the blue, of which it is probably a decomposition product. This specimen is a stage farther removed from ordinary faience and a stage nearer normal glass than the other ten specimens.

GLAZED STEATITE

There are two specimens of this, one a large barrel-bead and the other a small piece of what may have been a very small vase.

Dm. 46. The body material is very hard, but can just be scratched by steel; it has originally been coated on the outside with a blue glaze, which has largely decomposed and become brown, though small patches of the blue still remain in parts. The specific gravity is 2.64.² The residue after treatment with hydrofluoric acid and evaporation amounts to 60%,³ and the material cannot, therefore, be quartz.

Sd. 1823. The body-material is white, compact, and fairly friable. One side is decorated with irregular brown stripes, which are slightly glossy, whereas the white ground between the stripes is not glossy; the other side is entirely brown with a slight glossiness in parts.

¹ B. 115; B. 693; Dk. 1443; Dk. 2828; Dk. 3215; Dk. no number; *Hv. 330*; *Hv. 4563*; *Hv. 5255*; *Hv. 5535*; *Hv. 6130*.

² Kindly determined by Mr. R. E. Gubbins, Geological Survey, Cairo.

³ Kindly determined by Mr. L. F. McCallum, F.I.C., Chemical Department, Cairo.

⁴ See Dk. 2668; Dk. 2764; Dk. 2760 (*b*) and Dk. 2760 (*c*).

MISCELLANEOUS UNCLASSIFIED MATERIALS

Dk. 2764. This is a homogeneous material of a light-yellow colour, which when examined microscopically is seen to consist essentially of quartz. The apparent specific gravity is 2.09¹, and when treated with hydrofluoric acid and evaporated to dryness the residue is 5.7%,² hence 94.3% was quartz that disappeared as volatile silicon fluoride. This resembles very much the light-yellow outside layer of *Dk. 2668* and the outer coating of *Hv. 5535*, and it seems probable that originally it was the material called above 'glassy faience (Variant E)' or 'imperfect glass' that has decomposed.

Dk. 2760 (b) and (c). The first of these specimens is a small ball-bead and the second a small narrow tubular bead. Both are alike and are practically identical with *Dk. 2764*; they consist essentially of finely powdered quartz. It is suggested that both specimens were originally either faience, Variant D, or glassy faience, Variant E.

Dm. 250, Sd. 1493, and Vs. 1427. These are all alike, and are parts of small vases or crucibles. They are not faience, or any variant of faience, or imperfect glass; they consist of an artificial and not a natural material; they are very light in weight, and almost white in colour, and resemble bone ash. Chemical tests being applied, it was found that one contained a trace of a copper compound (the other two were not tested for copper), and that all three contained phosphate. When treated with hydrofluoric acid and evaporated to dryness, one of the specimens left a residue of 62.7%;³ thus they are not quartz, a fact which is also established by the microscopic examination. Without a complete chemical analysis, which has not yet been possible, the nature of the material cannot be stated, but it is tentatively suggested that it may be or may contain bone ash.

GLAZED POTTERY

Mackay states that 'the earliest examples of glazed pottery have been found at Mohenjo-daro',⁴ and again, '... two fragments of great technical interest; they are the only examples of glazed pottery that have as yet been found at Mohenjo-daro.'⁵ One of these specimens is stated⁶ to be a pottery bead: 'This bead has a pottery base overlaid with two coloured glazes.' The glaze and the technique of the glazing have been described by Dr. H. J. Plenderleith of the British Museum Research Laboratory,⁶ and analyses both of the body-material and of the glaze, made by Dr. Hamid,⁷ are as follows:

	Body %	Glaze %
Silica . . .	71.1	86.3
Alumina . . .	9.3	7.8
Oxide of iron . . .	10.9	
Lime . . .	1.8	2.4
Magnesia . . .	1.6	0.6
Soda . . .	3.8	1.2
Potash . . .		nil
Loss on ignition . . .	1.7	2.1
	100.2	100.4

The analyses are given to two places of decimals, but to make them comparable with the other analyses the present writer has only shown one place.

¹ Kindly determined by Mr. R. E. Gubbins, Geological Survey, Cairo.

² Kindly determined by Mr. L. F. McCallum, Chemical Department, Cairo.

³ In Marshall, *op. cit.*, 581.

⁴ *Op. cit.*, 366.

⁵ *Op. cit.*, 516, 577.

⁶ *Note on Glazed Pottery*, in Marshall, *op. cit.*, II, 692-3.

⁷ *Op. cit.*, 578.

III. Glazed Ware in Mesopotamia

Dr. Mackay writes: 'The glazing of beads and other objects made of faience¹ was certainly practised in very early times in Mesopotamia, for a number of faience articles were found at Jemdet Nasr near Kish. . . . The date of the site . . . is still open to question, but there can be no doubt that is as old as, if not older than, the pre-Dynastic period of Egypt. I would myself date it as early as 4000 B.C., if not some time before that.'² And again: 'The fact that faience was common at Jemdet Nasr, which up to the present is the earliest site that has been excavated there and which from the nature of its painted pottery appears to be of a date prior to the pre-Dynastic period of Egypt, suggests indeed that the Egyptians borrowed the craft either from Mesopotamia or Elam.'³

In his published account of Jemdet Nasr, Mackay says very little about faience, namely,³ 'The beads that were found are of the following materials: glaze⁴ . . . Both this shape and a form of bead with both sides flattened were carried out in glaze . . .⁴ The two smallest of these amulets are made of glazed paste . . . One seal is of glaze . . .⁴ The art of glazing was practised; and beads made of this material . . . The art of glazing beads and other small objects seems, however, to have been common to both places' (i.e. Jemdet Nasr and Kish).

With regard to the dating of the Egyptian Predynastic period, it may be pointed out that Sequence Date 31, to which Petrie assigns the earliest faience (see p. 141), is the early part of the Middle Predynastic period and hence, even on the lower dating of Meyer and Breasted, almost certainly well before 4000 B.C.

C. L. Woolley (now Sir Leonard Woolley) makes no mention of faience in the Index of his *The Royal Cemetery*, but in a chapter dealing with beads it is stated (II, 369) that 'In the Predynastic Cemetery . . . glazed frit is used, but is not common (18 cases) . . .' and that 'In the Sargonic period . . . glazed frit is not infrequent . . .'

The following tabular statement shows briefly the earliest dates at present known for the several kinds of glazed ware in Egypt, India, and Mesopotamia respectively:

	<i>Egypt</i>	<i>India</i>	<i>Mesopotamia</i>
Glazed steatite	Badarian, c. 5000 B.C.	3000-2750 B.C. ⁵	Doubtful ⁶
Faience (glazed powdered quartz)	Predynastic, S.D. 31, before 4000 B.C.	" "	Jemdet Nasr, c. 4000 B.C.
Red faience (Variant C)	XVIIIth Dyn., c. 1580-1350 B.C.	" "	No data
Faience with hard blue or green body (Variant D)	XXth-XXVIth Dyns., c. 1200-525 B.C.	" "	" "
Glassy faience (Variant E)	XXVIth Dyn., c. 663-525 B.C.	" "	" "
Glazed solid quartz	Predynastic, S.D. 48, before 3400 B.C.	" "	Possibly c. 2750 B.C. ⁷
Glazed pottery	Arab period, after 640 A.D. ⁸	" "	1000-600 B.C.

¹ It was not faience that was glazed, but powdered quartz, the result after glazing being faience.

² In Marshall, *op. cit.*, 379-80.

³ E. Mackay, *Report on Excavations at Jemdet Nasr, Iraq*, 272-4; 281, 290, 291.

⁴ See p. 142.

⁵ See also H. C. Beck, *Notes on Glazed Stones*, Part I, *Glazed Steatite*, in *Ancient Egypt and the East*, 1934, 69, 77-83.

⁶ H. C. Beck, *op. cit.*, Part I, 76-7.

⁷ H. C. Beck, *Notes on Glazed Stones*, Part II, *Glazed Quartz*, in *Ancient Egypt and the East*, 1935, 19, 21.

⁸ H. C. Beck, *op. cit.*, Part II, 19-33.

⁹ Exclusive of imported ware of foreign origin found in Egypt.

A MAGICAL OSTRACON

By ALAN W. SHORTER

With Plates viii, ix

THE fine ostrakon reproduced on Pl. ix is in the possession of Mr. E. Armytage, who has generously given me permission to publish it. It measures 8 in. \times 5 in., and bears on the obverse nine lines of hieratic text written in a clear hand in black ink, with 'verse-points' marked in red. The handwriting dates the ostrakon to the Nineteenth or Twentieth Dynasty. Provenance is unknown, but we may not be far wrong in suggesting that it was Dār el-Medinah, where a large number of ostraca have been found in recent years.

CONTENTS

The text consists of two spells, the first of which is directed against a person described as an ox-herd or cattle-farmer. In this spell the magician, after stating that his enemy will fall a victim to the horns of one of his own beasts, and that the gods Month and Sēth will attack him, declares that he himself is immune from any attack from the victim, through identification with the gods Month and Osiris. He passes on to a manual rite, accompanied by invocation to the Sun-god, which will put his enemy completely in his power, and concludes by stating that he will dismember him like a sacrificial ox, and eat his flesh. In the second spell the magician declares that he will change himself into a fly and enter the belly of his victim, causing him such intense agony that he will be contorted with pain. He concludes with a declaration that he himself is in excellent case.

Although the text presents certain difficulties the general sense is perfectly clear, and provides a new and extremely interesting form of spell.* The most striking passage, in my opinion, is the magician's method of countering an attack from his victim which may prove fatal (see Note 7).

TRANSLATION

(1) Another spell:¹ (for) smiting a man. O whoever it is that comes for me,² if he is an ox-herd³ he shall taste his horn when [he] fights [against him (?)].⁴ (2) Month is come⁵ that he may grasp thy horn!⁶ Sēth is come that he may smite (thee)! If thou seizest my foot I am Month! If thou slayest me (3) I am Osiris!⁷ O Rēc!⁸ O Atūm! O all ye other (??) gods!⁹ I take earth (?)¹⁰ in my right hand and drop it into my (4) left hand.¹¹ I say: 'Come to me, Month, lord of the day! Come that thou mayest put N. born of N. into my hand like an *ilq*-insect (?)¹² (5) in the mouth of *hy*-birds! Stand thou still! Where art thou?¹³ I am Month whom the gods adore. I will sever thy bones and eat thy flesh. (6) I will take away thy strong arm¹⁴ and it shall be put in my hand.¹⁵ To be recited over the earth (?) upon thy hand.¹⁶

Another spell. Stand thou still, whoever comes! I am one that enters (7) the bed (?) and comes forth upon the ground, a great fighter (?)¹⁷ Stand thou still!¹⁸ Where art thou regarding me?¹⁹ I will enter thy belly as a fly²⁰ and (8) behold thy belly in its interior. I will make thy face become the back of thy head,²¹ and the front of thy foot become thy heel. Thy speech²² profits not, it is

* I am indebted to Professors Blackman and Glanville, with whom I have briefly discussed this text, for one or two suggestions, and to Professor Gunn for further valuable comments of which I have made use.

not heard. (9) Thy limbs shall be weary and thy knee shall be painful. (But) I (myself) stand up!²³ I am Horus son of Isis, and I come forth²⁴ on my feet!

COMMENTARY

1. $\overline{\text{A}}$ has been written by mistake for $\overline{\text{C}}$.
2. Either 'comes against me' or, more probably, 'comes for me', i.e. to fetch me. For the latter meaning of the preposition *r*, especially used in a hostile sense of the dead coming to fetch away the living, see de Buck, *Griffith Studies*, 57-8.*
3. The *m* of equivalence has dropped out before *mnh*. This clause must be subordinate, describing the adversary, i.e. 'if he is an ox-herd' or possibly 'cattle-farmer'. For *mnh* 'lad', a term applied to labourers etc., see *Wb.*, II, 83. See also Spiegelberg, *ZAS*, 53, 109,* where he renders the word by 'Pächter', and Gardiner, *Chester Beatty Pap.* v, rt. 5, 7 and vs. 1, 2.* In the last-mentioned instance Gardiner renders 'tenant-farmers'.
4. For the expression 'to taste the horn of an ox', i.e. to be gored, see *Wb.*, v, 444. A small portion of text is missing at the end of this line, where the edge of the ostrakon is broken, and it is possible, therefore, to understand the Egyptian in two ways:
 - (1) restore $\overline{\text{C}}$ *r.f* at the end of the line, and translate 'the taste of his (an ox's) horn shall fight against him'.
 - (2) understand *dp* as a mistake for *dp.f*, and restore the suffix *.f* (perhaps *.f r.f?*) after *q_h*, translating: 'He shall taste his (an ox's) horn when [he] (the ox) fights [against him (?)]'.
 Of the two alternatives (1) seems to be a forced expression, and (2) more natural and therefore more probable. The possessive suffix *.f* attached to *db* takes up the preceding plural *kne* as a singular.
5. *iw* (as again after *Stš*) is Old Perfective. Month is probably invoked simply as the god of battle, and as therefore useful as a protector against hostile assaults, rather than because, as possessing a bull-cult, he would be suitable to deal with an ox-herd or cattle-farmer.
6. 'thy horn'. This may be understood in two ways:
 - (1) by taking the text as it stands, in which case the word 'horn' must be used in a non-literal sense, applied to the ox-herd himself. He is himself to be treated as an ox doomed to slaughter (see below, note 14).
 - (2) by emending *.f* for *.k*, when we must translate: 'Month is come to grasp his (i.e. the ox's) horn; Sēth is come to smite (or "drive") him', i.e. the two gods goad the bull to make the attack described in line 1 of the spell.
7. Restore $\overline{\text{C}}$ *wi* after *hdb*, where the edge of the ostrakon is broken. The writing with *b* at the end of *hdb* is strange, but not unlikely, in view of this scribe's habit of making *b* very large and writing a sign within it (see *db* in lines 1 and 2). The foot of the *b* here is quite clear. If the enemy only attacks a member of the magician's body the magician is able to repulse him by invoking the war-god Month. But if the adversary goes so far as actually to slay him, the only god who can help him is Osiris, the god of the realms of the dead, who himself was enabled by magic to triumph over the death inflicted upon him by his brother Sēth. Osiris is thus expressly equated with triumph over death. An interesting passage.
8. The speaker now begins the invocation to the gods which accompanies and at the same time describes the manual act.
9. The word *isw* (here written twice) does not appear in the *Wörterbuch*, nor have I been



* I owe these references to the kindness of Professor A. M. Blackman.




THE ARMYTAGE OSTRACON

Scale 1:1.1


able to find it in other glossaries. A possible guess would seem to be that the expression *i isw isw ntr-w* covers a number of, if not all, the gods. Otherwise it must be taken as a divine name, 'O *Tsw, Tsw* of the gods (?)'.*

10. No word written thus appears in the dictionaries, but the writing suggests a connexion with , *lctn* 'ground', 'earth', of which it may possibly be a miswriting, and we may not be far wrong in suggesting that 'earth', 'clay', or some such substance is meant. We may compare the writing  for *iw* 'dog' (Gardiner, *Late-Egyptian Stories*, p. 6, l. 14, with note *d*), which would seem to be the converse error!

11. In the manual rite the object represents the enemy, and by dropping it into his left hand the magician shows what he wishes to happen, i.e. that his enemy may be 'placed in his hand'.





12. *itit* is a word which does not occur in the *Wörterbuch*. The group *pr* is obviously a mistake for the determinative  alone. Bird-signs are sometimes used as determinatives for insects (as e.g. in *ff* below), and the *itit* must be an insect which is gobbled up by the *hy*-birds.† In the same way in which the insect is snapped up by their beaks, the magician wishes his enemy to be placed in his hand. For the *hy*-bird see *Wb.*, I, 224, and references there given. The species has not been identified, but Griffith in the Stela of Nauri, l. 19 (*JEA*, 13, 199), translated 'roasting-birds (?)', connecting the name with *hy* 'brazier', etc.

13. Or 'Stand thou still, where (or wherever) thou art'?


14. The fate of the victim is described as if he is a bull being cut up by the butchers, a poetic punishment since his livelihood depends on cattle! Hence *hps* (l. 6), which, applied to a human being and written as here with  determinative, means 'strong arm' or 'strength of arm', probably here has also the literal meaning of 'foreleg'. We are reminded of the many Egyptian paintings and sculptures showing butchers at work, in which a foreleg is separated from the carcase and removed for use in the offering-rituals.

15. The preposition *m* has been omitted from the text after *dt-tw-f*. The addition of the 2nd pers. sing. suffix after *dt-i* is of course a mistake.

16. These words conclude and sum up the foregoing spell by stating that it is to be recited over the earth (?) held in the magician's hand, as described above in ll. 3-4.

17. The precise meaning of this passage is not entirely clear. The word following *m* at the beginning of l. 7 is apparently a muddled writing of  *sdr* 'bed' (*Wb.*, IV, 392. Or possibly *sdr* 'sleeping-quarters', *ibid.*?). The word after *pr* can only be a writing of , *sstw*, *ecnt*, 'ground', 'floor', and in order to make sense the preposition *hr* 'upon' must be supplied. But the following word may be transcribed from the hieratic in two ways: (1) , (2) . In favour of (1) is the fact that the long sign is more likely to represent *o* than *s*, being less often employed for *s* than the form with the two cross-strokes. The *o* will then be for *so*. In favour of (2) is perhaps a greater resemblance of the second sign to the seated man than to *s*. If (1) is read it is possible to translate 'a great one who makes war', i.e. 'a great (or fierce) fighter'. If (2) is adopted the words may be construed in several ways: 'a man who fights' (describing the magician); 'and comes forth upon a man's floor, a fighter'; 'enters the bed and comes forth upon the floor of a man who fights'. At any rate the passage as a whole seems to refer to the magician's power of turning himself into an insect, as described later on, in which form he is able to gain entrance to the victim's room. By the expression *pr hr sstw* it is apparently meant that the insect is able to come out of

* There was a divine being *Is(w?)* worshipped at Edfu. See Engelbach, *Ann. Serv.*, 22, 136 ff.; 23, 183, 186.

† See the verb *it*  'to fly' (or similar meaning), given in *Wb.*, I, 151, with which our word is possibly connected, i.e. a 'flying' or 'fluttering' thing, an insect of some sort?

the victim's bed and leave the room by crawling on the ground, under the door. This is probable, since the antithesis between *tk* and *pr* suggests that we have here the usual claim, made in Egyptian religious texts with such tedious frequency, that the speaker is able both to come into and to go out of some place, i.e. has complete freedom of action. Here the idea is that the victim is nowhere safe from the magician.

18. Evidently a writing of *ḥk-k* 'stand thou still!', as above.

19. *r-i* can only mean 'regarding me', 'in relation to me', i.e. whether he is near to or far from the speaker. Again we may possibly translate: 'where (or wherever) thou art regarding (or "in relation to") me'.

20. *m* has dropped out before *ht-k*. It is far more probable that *ḥf* 'fly' is meant than *ḥy* 'bee', since the former could gain entry through a person's mouth much more easily. For writings of these two words with a bird-sign as determinative see *Wb.*, I, 182. The remainder of our text describes the physical sufferings which the magician, now inside the stomach of the victim in the form of a fly, is able to inflict upon him. The idea in mind is probably that of the effects of a poisoning of some kind, and the screwing round of the victim's head and feet are the contortions which sufferers from acute poisoning are wont to perform.

21. Lit. 'the parts of the back of thy head', or simply 'thy back parts'. The victim's head is twisted completely round in his agony, and, as stated in the next clause, his foot is also.

22. By 'speech' is probably meant magical utterances which the victim may use on his own behalf, perhaps against the magician.

23. The spell closes with an emphatic declaration that, while the victim is racked with pain and altogether in a sorry state, the magician, identified with Horus son of Isis, is in full command of his faculties.

24. I.e. from the belly of the victim?

NEW LIGHT ON THE RAMESSIDE TOMB-ROBBERIES

By J. CAPART, A. H. GARDINER, AND B. VAN DE WALLE

With Plates x to xvi

THE history of Egyptology has been rich in sensational discoveries, and on many occasions scholars have been thrilled by the sudden emergence of some tomb or papyrus believed to be lost beyond recall. It may be doubted, however, whether the annals of our science will ever point back to a literary find of greater interest than that to which the present article is devoted. Our lamented friend Professor Peet, when Editor of this *Journal*, published in it an essay¹ bearing a title only slightly different from that here chosen. Little could he have imagined that the missing upper half of the well-known Amherst papyrus, his greatest favourite among all the Tomb-robberies series, would ever again see the light of day, and it is for that reason that Professor Capart, the fortunate discoverer, has desired that the *editio princeps* of the completed text should appear in Peet's own periodical. A provisional translation has been published elsewhere,² but it was necessary that a careful philological study should follow in due course, and for that purpose M. Capart enlisted the support of Dr. Alan Gardiner. He for his part has found hardly anything to alter in the excellent transcription made by M. Capart and M. van de Walle of the Papyrus Leopold II, as the newly discovered manuscript is to be called, but it seemed desirable to append the complementary text from the Amherst papyrus itself. Professor Peet had been very successful in rearranging the fragments of the first page of this, and the text given in his book³ has stood us in good stead, though a few minor corrections have been rendered possible by photographs kindly furnished by the authorities of the Pierpont Morgan Library in New York as well as by inspection of the original there. To make assurance doubly sure, Dr. Černý has been kind enough to check over the Plates of transcription accompanying this article (Pls. xii-xvi), for the excellent appearance of which we are deeply indebted to Mr. H. W. Fairman. The photographic reproductions (Pls. x, xi) comprise only the newly discovered tops of the pages.

At the outset let M. Capart be allowed to describe the discovery in his own words.⁴

'On Tuesday the 5th February of this year I arrived early at the Musées Royaux d'Art et d'Histoire du Cinquantenaire, knowing that I was going to find there some antiquities which His Majesty King Leopold III had graciously commanded to be handed over to our Egyptian department. These consisted of a number of objects brought from the Valley of the Nile by the Duke of Brabant, the future Leopold II, at the time of his travels in 1854 and in 1862-1863. I recalled having summarily examined them some years ago in a glass case in the Palace of Brussels, and I knew that they consisted of statuettes of faience, of bronze figures of gods, and especially of a remarkable plaque of inlaid bronze which had once been attached to a piece of furniture. I was naturally very glad to be thus able to add to our archaeological collections a number of specimens of which several would fill gaps, but I was

¹ *Fresh light on the Tomb-Robberies of the Twentieth Dynasty at Thebes*, in *JEA* 11, 37, 162.

² By J. Capart in *Chronique d'Égypte* 10, 215 ff.; also in *Bulletins de l'Académie royale de Belgique*, 1935, pp. 49-55, and *C.-R. Académie des Inscriptions et Belles-Lettres*, Paris, 1935, pp. 121 ff.

³ *The Great Tomb-Robberies of the Twentieth Egyptian Dynasty* (henceforth quoted in the notes and commentary simply as Peet), Pls. IV and V.

⁴ *Le Flambeau*, March, 1935.

far from expecting that this collection of antiquities held in reserve for me a discovery of such exceptional interest.

'My attention was in due course drawn to a small wooden figure that I had not noticed previously. It was a funerary statuette of rough workmanship, with a painted inscription giving the name of Khay, superintendent of works and royal scribe in the temple of the king. Usually these hollow figures, standing upright on a pedestal, serve as receptacles for funerary papyri. The pedestal of the specimen in question had disappeared, and a piece of clearly ancient textile appeared on the outside. Was anything else in the cavity? I slowly drew out the rag and saw revealed a roll of papyrus a good twenty centimetres in height, and appearing to be in a remarkable state of preservation. Two tiny fragments allowed some large hieratic handwriting to be seen. My first impression was that we had here a funerary papyrus, and I postponed till the afternoon the task of following up my discovery. The moment having arrived, I began by raising the outer fold of the roll with the point of a knife. My readers will understand the peculiar sensation which came over me as I read aloud, for the benefit of those present, the date of Year 16 of Ramesses IX (*c.* 1126 B.C.). This year is famous in the annals of Egyptology. It is that of the celebrated Abbott Papyrus, which has been in the British Museum since 1857. Had we found a new piece to add to the *dossier* of which the Abbott Papyrus is the principal document?

'The preparatory operations were not lengthy. The roll was placed upon thick leaves of blotting-paper moistened with clean water. Soon the first layer had absorbed sufficient moisture to enable it to be unrolled without risk. Already the first signs of the second page appeared, and I read some words or rather attempted to grasp some sentences, impatient to ascertain the tenor of the text. Suddenly I recognized the cartouches of the king Sekhemrê-shedtau, son of Rê, Sebkemsaf. I then had brought from the Library the catalogue of Lord Amherst's papyri as edited by Professor Newberry. One can judge my surprise, indeed my stupefaction, as a single glance at one of the plates of the catalogue revealed the fact that the lower edge of the new papyrus fitted exactly the upper edge of the Amherst, and that where the latter showed only fragments of signs, the piece that we were in course of unrolling gave their missing portions.

'The unrolling was accomplished without mishap and yielded four fine pages in which, apart from the beginning, there was no lacuna whatsoever. Before the end of the week the papyrus was mounted and photographed, and by the following Monday, with the help of my former pupil, M. Baudouin van de Walle, I had completed the transcription. The broken passages at the commencement were easy to restore, for the persons mentioned were already known from the Abbott Papyrus.'

The translation and commentary that follow are the work of Dr. Gardiner. In the translation an attempt has been made to avoid that over-literalism which mars so many Egyptological translations, but in places of difficulty a word for word rendering is given in the notes. Red writing in the original is represented by small capitals.

Translation

- 1, 1 YEAR 16, third month of the inundation season, day 22,¹ under His Majesty the king of Upper and Lower Egypt, the lord of the Two Lands Neferkerê-setpenrê, the son of Rê, lord of diadems like Amûn, Ra'messe-khatemwêse-mereramûn, beloved of Amen-rê, king of the gods, and of Rê-Harakhti, given life for ever and ever.

THE EXAMINATION of the men found to have violated the tombs on the west of Thebes, accusation against whom had been brought by Pwerto, the mayor of the west of Thebes and chief

¹ [The reading '23' seems more probable in the original; see the Postscript, p. 192].



Page 1



Page 2

- 1, 5 of police attached to the great and noble tomb of millions of years of Pharaoh, by the [scribe of the quarter] Wennofre, and by the district superintendent of the west of Thebes Amennakhte; and whose examination was made in the treasury of the house of Montju, [lord of Wēse,¹] by the city-governor and vizier Kha[emwēse], by the royal butler Nesamūn, the scribe of Pharaoh and major-domo of the house of the Votaress of [Amen-rē, king of] the gods, by the royal butler [Neferkerētemper]amūn, the herald of Pharaoh, and by the mayor of Thebes Pesiūr.
- [THERE WAS BROUGHT] Amen[pnūfer, the son of Anḥernakhte], a stone-mason of [the house of Amen-rē, king of] the gods, under the authority of the high-priest of [Amen-rē, king of the gods, Amenḥotpe] [There was said to him:] your thieves [Name (?) the] thieves [who were] with you. [Amen-rē, king of] the gods.
- 1, 15 He said: I was employed upon work [under the authority of (?) Raḥmessena]khete, [who was high-]priest [of A]men[-rē, king of] the gods, to[gether with the other] fellow stone-masons who were with me, and I fell into the habit of robbing the tombs in company with the stone-mason Ḥaṣpiwēr, the son of Meneptah, belonging to the temple of Usimaṣrē-miamūn [in the house of] Amūn² under the authority of [Nesamūn], the *sem*-priest of this house. Now when the year 13 [of Phara]oh [our lord] had begun, four years ago, [I] joined with [the carpenter]
- 2, 1 Setekhnakhte, the son of Pentsanūke, of the temple of Usimaṣrē-miamūn in the house of Amūn under the authority of the second priest of Amen-rē, king of the gods, namely the *sem*-priest Nesamūn of the temple of Usimaṣrē-miamūn in the house of Amūn; also with the decorator Ḥaṣpiwō of the house of Amūn, with the field-labourer Amenemḥab of the house of Amenope under the authority of the said³ high-priest of Amen-rē, king of the gods, with the carpenter Irenamūn belonging to the overseer of hunters of Amūn, with the water-pourer Kaemwēse of the portable shrine of King Menkheprurē⁴ in Thebes, and with the boatman of the mayor of
- 2, 5 Thebes Ḥay, the son of Tjaroy, IN ALL 8 men. We went to rob the tombs in accordance with our regular habit, and we found the pyramid of king Sekhemrē-shedtauī, the son of Rē, Sebkemsaf, this being not at all like the pyramids and tombs of the nobles which we habitually went to rob. We took our copper tools and forced a way into the pyramid of this king through its innermost part. We found its underground chambers,⁵ and we took lighted candles in our hands and went down. Then we broke through the rubble that we found at the mouth of his
- 2, 10 recess (?), and found this god lying at the back of his burial-place. And we found the burial-place of Queen Nubkhaṣ his queen situated beside him, it being protected and guarded by plaster and covered with rubble. This also we broke through, and found her resting [there] in like manner. We opened their sarcophagi and their coffins in which they were, and found the noble mummy of this king equipped with a falchion; a large number of amulets and jewels of gold were upon his neck, and his headpiece of gold was upon him. The noble mummy of
- 2, 15 this king was completely bedecked with gold, and his coffins were adorned with gold and silver inside and out and inlaid with all kinds of precious stones. We collected the gold we found on the noble mummy of this god, together with (that on) his amulets and jewels which were on his neck and (that on) the coffins in which he was resting, [and we] found [the] queen in exactly the same state. We collected all that we found upon her likewise, and set fire to their coffins. We took their furniture which we found with them consisting of articles of gold, silver, and bronze, and divided them amongst ourselves. And we made into eight portions the gold which we
- 3, 1 found on these two gods coming from their mummies, amulets, jewels, and coffins, and 20 *deben* of gold fell to each of the eight of us, making 160 *deben* of gold, the fragments (?) of the furniture not being included. Then we crossed over to Thebes. And after some days, the district superintendents of Thebes heard that we had been stealing in the West, and they seized me and imprisoned me in the office of the mayor of Thebes. And I took the 20 *deben*

¹ i.e. Thebes. The temple of Montju lies to the north of the great temple of Karnak.

² i.e. the funerary temple of Ramesses III at Medinet Habu.

³ Lit. 'this'. The high priest Amenḥotpe of 1, 9 (now lost) must be meant, not Raḥmessenakhte of 1, 15

⁴ i.e. Tuthmosis IV.

⁵ Lit. 'its netherworld'; see the Commentary.

of gold that had fallen to me as (my) portion, and gave them to Khaemope, the scribe of the quarter attached to the landing-place of Thebes. He released me, and I rejoined my

- 3, 5 companions, and they compensated me with a portion once again. Thus I, together with the other thieves who are with me, have continued down to this day in the practice of robbing the tombs of the nobles and people of the land who rest in the west of Thebes. And a large number of people of the land rob them as well, and are (as good as) partners (of ours).

STATEMENT of the names of the eight thieves who had been in this pyramid:

Amenpnüfer, the son of Anḥernakhte, a stone-mason of the house of Amen-rē, king of the gods, under the authority of the high-priest of Amen-rē, king of the gods, Amenhotpe.

Ḥatpiwēr, the son of Meneptah, a stone-mason of the temple of Usimatrē-miamün in the house of Amün, under the authority of the second priest of Amen-rē, king of the gods, Nesamün, the *sem*-priest of that temple.

- 3, 10 The carpenter Setekhnakhte, the son of Pentanūke, of the temple of Usimatrē-miamün in the house of Amün, under the authority of the second priest of Amen-rē, king of the gods, Nesamün, the *sem*-priest of that temple in the house of Amün.

The decorator Ḥatpito, the son of ¹, of the house of Amen-rē, king of the gods, under the authority of the said high-priest of Amün.

The carpenter Irenamün belonging to Nesamün, the overseer of hunters of the house of Amen-rē, king of the gods.

The field-labourer Amenemḥab of the house of Amenope, who is employed in the Island of Amenope under the authority of the said high-priest of Amün.

The water-pourer Kaemwēse of the portable shrine of king Menkheprurē under the authority of ¹.

- 3, 15 Ḥanūfer, the son of Nekhemmut, who was in the service of the Nubian slave Tjalamün belonging to the said high-priest of Amün.

TOTAL, people who had been in the pyramid of this god, 8 men. Their examination was effected by beating with sticks, and their feet and hands were twisted. They told the same story. The city-governor and vizier Khaemwēse and the royal butler Nesamün, (who is) the scribe of Pharaoh, caused the thieves to be taken in front of them to the west of Thebes in year 16, third month of the inundation season, day 19, and the thieves pointed out the tomb of this god which they had violated.

RECORD was made in writing of their examination and their condemnation, and report was sent concerning it into the presence of Pharaoh by the vizier, the butler, the herald, and the mayor of Thebes.

- 4, 1 YEAR 16, third month of the inundation season, day 22, day of handing over the thieves who had been in the pyramid of this king to Amenhotpe, the high-priest of Amen-rē, king of the gods. (This was done) at the Great Tribunal by the city-governor and vizier Khaemwēse, by the royal butler Nesamün, the scribe of Pharaoh and major-domo of the house of the Votaress of Amen-rē, king of the gods, by the royal butler Neferkerētemperamün, the herald of Pharaoh, by the mayor of Thebes Pesiūr, and by the Great Notables of the Great Tribunal of Thebes. It was written on a roll of papyrus, and lodged in the office of writings on this day.

PEOPLE handed over to him on this day by the Great Notables.

The stone-mason Amenpnüfer, the son of Anḥernakhte, of the house of Amen-rē, king of the gods, under the authority of the said high-priest of Amün.

- 4, 5 Ḥatpiwēr, the son of Meneptah, a stone-mason of the temple of king Usimatrē-miamün in the house of Amün, under the authority of the second priest of Amen-rē, king of the gods, Nesamün, the *sem*-priest of the temple of Usimatrē-miamün in the house of Amün.

The agent Amenemḥab of the house of Amenope, who was employed in the Island of Amenope under the authority of the said high-priest of Amen-rē, king of the gods.

The gardener Shedsuany, the son of Anynakhte, of the house of Amenophis the favourite of Amen-rē, king of the gods, under the authority of the said high-priest of Amen-rē, king of

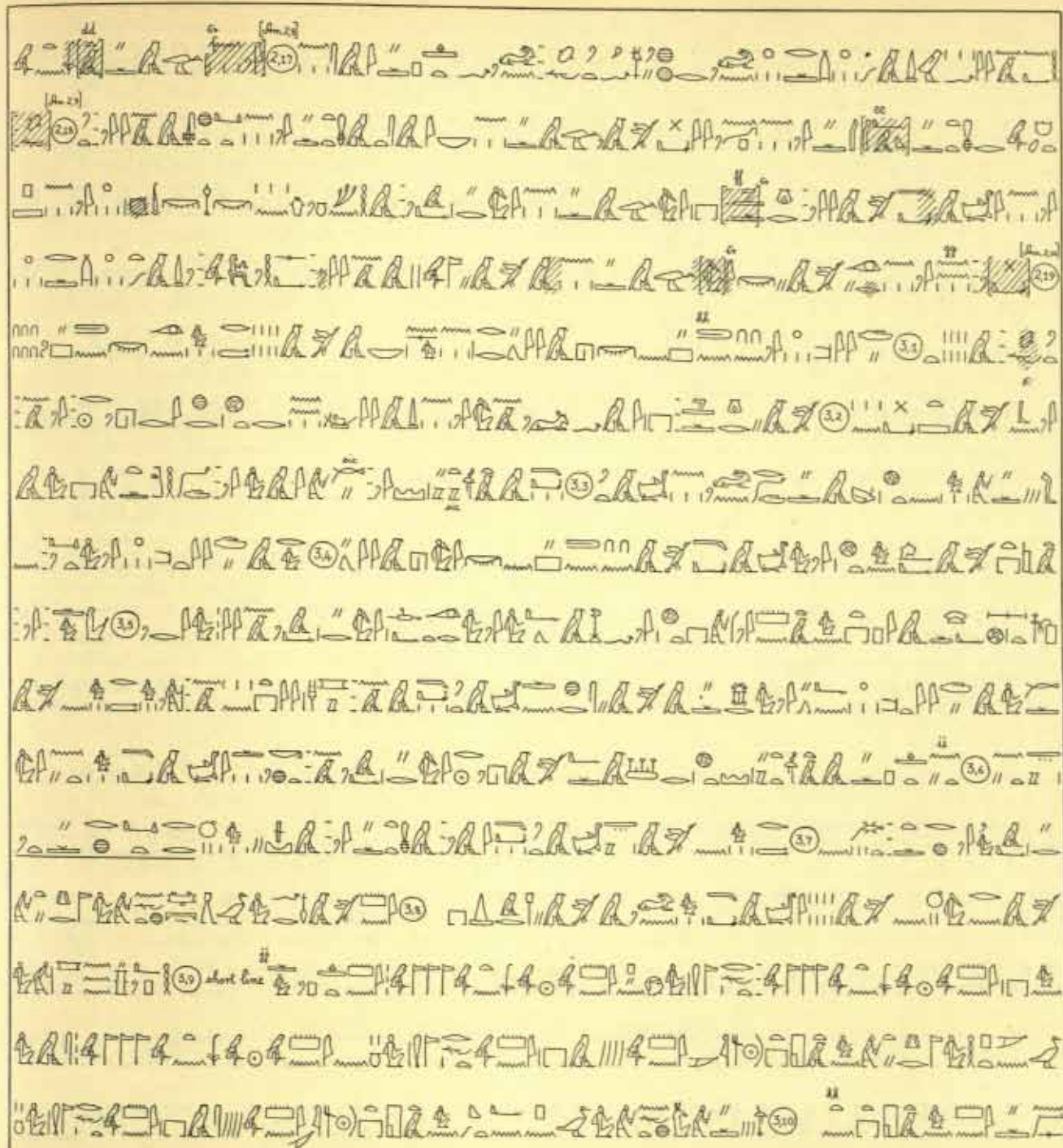
¹ The scribe has left a place free for the later insertion of this name.

Handwritten musical notation on a single page, featuring a series of staves with notes, rests, and other musical symbols. The notation is dense and appears to be a form of musical shorthand or a specific dialect of musical notation. The page is numbered "21" in the bottom right corner.

Notes v (=) omitted by mistake; see 3.14 aa This full form also in 4.2 ± B, more like B than B ± As Pet saw, the fragment here has been mounted too far towards the right ± Doubtful, but there seems room; for 2 it would also be possible to read 3, both signs being made alike. aa So Pet conjectured. bb So Pet, probably rightly cc Cf 3.19 where the aa over → has just the same unusual form.

PAP. LEOPOLD II (continuation)

Transcription including the lower halves of pages contained in Pap. Amherst



Notes ¹¹ There seems just room; Post, however, noted 'Probably no line' = Undoubtedly correct; for the form of *l* see 1.2. ¹² Restored from 3.2. ¹³ So clearly in photo, though one *am* is absent from Newberry's Plate ¹⁴ *is*, so too below. ¹⁵ Dittography. ¹⁶ Short line; note that an entire line is devoted to each separate person from 3.8-3.15. ¹⁷ Perhaps superfluous; see 1.1 but in the next line, near the end.

PAP. LEOPOLD II (continuation)

Transcription including the lower halves of pages contained in Pap. Amherst

Notes 11. Left blank to be filled later. mm 4, the signature here is written out above 23. mm 1. 22. Left blank to be filled out later. 44. From the new photos clearly a rubric. 99. 44.

Transcription including the lower halves of pages contained in Pap. Amherst






40) 4 2 1 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100 101 102 103 104 105 106 107 108 109 110 111 112 113 114 115 116 117 118 119 120 121 122 123 124 125 126 127 128 129 130 131 132 133 134 135 136 137 138 139 140 141 142 143 144 145 146 147 148 149 150 151 152 153 154 155 156 157 158 159 160 161 162 163 164 165 166 167 168 169 170 171 172 173 174 175 176 177 178 179 180 181 182 183 184 185 186 187 188 189 190 191 192 193 194 195 196 197 198 199 200 201 202 203 204 205 206 207 208 209 210 211 212 213 214 215 216 217 218 219 220 221 222 223 224 225 226 227 228 229 230 231 232 233 234 235 236 237 238 239 240 241 242 243 244 245 246 247 248 249 250 251 252 253 254 255 256 257 258 259 260 261 262 263 264 265 266 267 268 269 270 271 272 273 274 275 276 277 278 279 280 281 282 283 284 285 286 287 288 289 290 291 292 293 294 295 296 297 298 299 300 301 302 303 304 305 306 307 308 309 310 311 312 313 314 315 316 317 318 319 320 321 322 323 324 325 326 327 328 329 330 331 332 333 334 335 336 337 338 339 340 341 342 343 344 345 346 347 348 349 350 351 352 353 354 355 356 357 358 359 360 361 362 363 364 365 366 367 368 369 370 371 372 373 374 375 376 377 378 379 380 381 382 383 384 385 386 387 388 389 390 391 392 393 394 395 396 397 398 399 400 401 402 403 404 405 406 407 408 409 410 411 412 413 414 415 416 417 418 419 420 421 422 423 424 425 426 427 428 429 430 431 432 433 434 435 436 437 438 439 440 441 442 443 444 445 446 447 448 449 450 451 452 453 454 455 456 457 458 459 460 461 462 463 464 465 466 467 468 469 470 471 472 473 474 475 476 477 478 479 480 481 482 483 484 485 486 487 488 489 490 491 492 493 494 495 496 497 498 499 500 501 502 503 504 505 506 507 508 509 510 511 512 513 514 515 516 517 518 519 520 521 522 523 524 525 526 527 528 529 530 531 532 533 534 535 536 537 538 539 540 541 542 543 544 545 546 547 548 549 550 551 552 553 554 555 556 557 558 559 560 561 562 563 564 565 566 567 568 569 570 571 572 573 574 575 576 577 578 579 580 581 582 583 584 585 586 587 588 589 590 591 592 593 594 595 596 597 598 599 600 601 602 603 604 605 606 607 608 609 610 611 612 613 614 615 616 617 618 619 620 621 622 623 624 625 626 627 628 629 630 631 632 633 634 635 636 637 638 639 640 641 642 643 644 645 646 647 648 649 650 651 652 653 654 655 656 657 658 659 660 661 662 663 664 665 666 667 668 669 670 671 672 673 674 675 676 677 678 679 680 681 682 683 684 685 686 687 688 689 690 691 692 693 694 695 696 697 698 699 700 701 702 703 704 705 706 707 708 709 710 711 712 713 714 715 716 717 718 719 720 721 722 723 724 725 726 727 728 729 730 731 732 733 734 735 736 737 738 739 740 741 742 743 744 745 746 747 748 749 750 751 752 753 754 755 756 757 758 759 760 761 762 763 764 765 766 767 768 769 770 771 772 773 774 775 776 777 778 779 780 781 782 783 784 785 786 787 788 789 790 791 792 793 794 795 796 797 798 799 800 801 802 803 804 805 806 807 808 809 810 811 812 813 814 815 816 817 818 819 820 821 822 823 824 825 826 827 828 829 830 831 832 833 834 835 836 837 838 839 840 841 842 843 844 845 846 847 848 849 850 851 852 853 854 855 856 857 858 859 860 861 862 863 864 865 866 867 868 869 870 871 872 873 874 875 876 877 878 879 880 881 882 883 884 885 886 887 888 889 890 891 892 893 894 895 896 897 898 899 900 901 902 903 904 905 906 907 908 909 910 911 912 913 914 915 916 917 918 919 920 921 922 923 924 925 926 927 928 929 930 931 932 933 934 935 936 937 938 939 940 941 942 943 944 945 946 947 948 949 950 951 952 953 954 955 956 957 958 959 960 961 962 963 964 965 966 967 968 969 970 971 972 973 974 975 976 977 978 979 980 981 982 983 984 985 986 987 988 989 990 991 992 993 994 995 996 997 998 999 1000 1001 1002 1003 1004 1005 1006 1007 1008 1009 1010 1011 1012 1013 1014 1015 1016 1017 1018 1019 1020 1021 1022 1023 1024 1025 1026 1027 1028 1029 1030 1031 1032 1033 1034 1035 1036 1037 1038 10





Notes rr Short line; each of the next two lines is devoted to a single person. ss Seems from the photo to be rubricized.





PAP. LEOPOLD II (conclusion)


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

if it was the beginning of the latter year which Amenpnûfer was envisaging. Unhappily this explanation does not suit the facts. In the necropolis journal edited by Botti and Peet there are two passages which make it highly probable that the accession-day of Ramesses IX lay between the 17th and 23rd days of the first month of inundation,¹ and consequently the interval between year 13 and the date of the confessions can in no case have been much more than three years, and may have been less if the middle or end of year 13 was envisaged. All things being considered, the most plausible way of explaining the words 'four years ago' is that favoured by Gunn: he points out that simple-minded people, in stating the interval between two given dates, are apt to take the two extremes into the reckoning; thirteen, fourteen, fifteen, sixteen makes four years—and as an analogy Gunn quotes the French *huit jours, quinze jours*.





2, 2. The exact meaning of —  has still to be determined. In *Hood* 2, 17 = *Gol. Gloss.* 3, 3 this title follows 'coppersmith, gold-worker' and precedes , thought to signify 'worker in faience'. In *Anast. IV*, vs. C 6 craftsmen so called are engaged in adorning the royal palace together with  'draughtsmen'. Brugsch, *Wb. Suppl.* 699, quotes  from a statuette in Turin. The terms for 'stone-worker' and 'sculptor' being known, I conjecture that *nšdy* may designate the maker of those faience inlays that have been found at Tell el-Yahūdiya and Qantir. Peet notes that in *Br. Mus.* 10054, rt. 2, 13 one Ḥṣpico, probably the same man as is mentioned here, is called simply  'a stone-mason'. For the moment 'decorator' seems a good enough rendering.



2, 3.  . For the necessary correction see 3, 14 and *Br. Mus.* 10054, vs. 1, 7. The title 'water-pourer' (see *Wb.* I, 257) refers to professional officiants at the shrine of some dead king or worshipped person. In Greek times the *χοαχούτης* is rather connected with the funerary cult; a full discussion in Wilcken, *Urk. d. Ptolemäerzeit*, II, 38 ff. The  of King Tuthmosis IV to which this particular 'water-pourer' was attached will have been a portable shrine in which the image of the king sat; for such shrines see the picture in Prisse, *Histoire de l'Art*, II, 88. The renderings *Sessel*, *Tragsessel* in *Wb.* v, 51, though unquestionable, scarcely do complete justice to the word. For example, in the stela of Ikhnofret (I. 12) the determinative is a shrine with folding doors and cavetto cornice .

2, 6.    'pyramids and (rock-)tombs'. These two terms are combined with a third , perhaps mere 'graves' (Peet) in *Abbott* 2, 1.

2, 7. The postponement of  the Coptic *ΔΝ* (*ZAS* 41, 130), to after the relative clause is another example of the Late-Egyptian habit mentioned in the note on 1, 7-8.

  'copper tools'. According to Černý *h* is a generic word for 'tools'. I rendered 'chisels' in *Pap. Ch. Beatty III*, vs. 4, 9, see Text, p. 25, with n. 7.

 here transitive as in Coptic, apparently the only clear instance of such use in Late Egyptian.  at the end of the line is perhaps to be rendered 'through'; cf.  'pass by' and 'fruit and honey  through the treasury of Pharaoh', Mar., *Karn.* 33.

¹ Botti and Peet (*Il Giornale della Necropoli*, p. 9), have strangely overlooked that the conclusion which they themselves were inclined to draw from Pl. 6, l. 13 combined with Pl. 7, p. 3, l. 1 is well confirmed by Pl. 34, l. 11 combined with *ibid.* l. 19. It is true that Pl. 33, l. 9 might seem to imply that there was no change of regnal year during the whole season of inundation, but in view of the harmonious evidence of the two passages already quoted the easiest course is to emend the first  of l. 9 into . The two authors rightly noted that ll. 5 and 6 of the same Plate show that there was a change of regnal year between the last day of the second month of winter and the first day of the fourth month of inundation. In his comments, *Tomb-Robberies*, p. 57, Peet has forgotten that the accession-day of Ramesses IX had been determined within narrow limits by Botti and himself.

2, 8. $\overline{\text{𓂏}}\overline{\text{𓂏}}\overline{\text{𓂏}}\overline{\text{𓂏}}$ is a general term for 'end', 'back-part' (of a tomb, or human residence, hence $\overline{\text{𓂏}}$) rather than the name of a specific room. At all events, in the plan of the tomb of Ramesses IV the end-room is called $\overline{\text{𓂏}}\overline{\text{𓂏}}\overline{\text{𓂏}}\overline{\text{𓂏}}\overline{\text{𓂏}}\overline{\text{𓂏}}$ 'the treasury of the end-portion', and there is no chamber specifically labelled *pr nfrw*; see *JEA* 4, Pl. 29 with p. 143. It is clear from the present description that the *nfrw* here referred to was on the ground-level, and not underground, and doubtless the word simply meant that part of the interior of the pyramid as far as possible removed from the entrance.

The next statement in the narrative is 'we found $\overline{\text{𓂏}}\overline{\text{𓂏}}\overline{\text{𓂏}}\overline{\text{𓂏}}\overline{\text{𓂏}}\overline{\text{𓂏}}$ ', after which the text continues 'we took lighted candles in our hands and went down'. The word *dt* 'nether-world' must be a general designation of the lower parts of the tomb where the king lay buried, hardly a name for the sloping passage or vertical shaft leading thither, since for the former we have the term $\overline{\text{𓂏}}\overline{\text{𓂏}}$ (*loc. cit.*) and for the latter the term $\overline{\text{𓂏}}\overline{\text{𓂏}}\overline{\text{𓂏}}\overline{\text{𓂏}}$.¹ The sentence here discussed must accordingly be an abbreviation of 'we found the way to (or to the entrance of) its underground chambers'.

$\overline{\text{𓂏}}\overline{\text{𓂏}}\overline{\text{𓂏}}\overline{\text{𓂏}}\overline{\text{𓂏}}\overline{\text{𓂏}}$ 'lighted candles'. The sense is obvious from the context, but the phrase is difficult to analyse both grammatically and lexicographically. In the Late-Egyptian *str* several stems seem to be confused, see *Wb.* iv, 333. *Hbs*, Coptic $\epsilon\eta\delta\epsilon$: $\epsilon\eta\delta\epsilon$, is the ordinary Late-Egyptian word for the candles used by the workpeople of the necropolis. These were made by the workpeople themselves, and consisted of wicks coated with $\overline{\text{𓂏}}\overline{\text{𓂏}}\overline{\text{𓂏}}\overline{\text{𓂏}}$ 'tallow', see *Cairo ostr.* 25820, *vs.*

$\overline{\text{𓂏}}\overline{\text{𓂏}}\overline{\text{𓂏}}\overline{\text{𓂏}}$ Coptic $\epsilon\eta\delta\alpha\iota$: $\epsilon\delta\eta\eta\iota$. This abnormal spelling is evidently an attempt to indicate the accented *-ra*.

2, 9. $\overline{\text{𓂏}}\overline{\text{𓂏}}\overline{\text{𓂏}}\overline{\text{𓂏}}$ 'demolish', doubtless not *hm*, but identical with the old $\overline{\text{𓂏}}\overline{\text{𓂏}}\overline{\text{𓂏}}\overline{\text{𓂏}}$ *hm*, as *Wb.* III, 282 suggests too tentatively.

$\overline{\text{𓂏}}\overline{\text{𓂏}}\overline{\text{𓂏}}\overline{\text{𓂏}}$. See the note on 2, 10-11.

$\overline{\text{𓂏}}\overline{\text{𓂏}}\overline{\text{𓂏}}\overline{\text{𓂏}}$. Doubtless for *tchrw* (*th*), $\overline{\text{𓂏}}$ in Late-Egyptian hieratic often standing for $\overline{\text{𓂏}}$, a habit which arose from the desire to save space by putting the head of the oblique longer $\overline{\text{𓂏}}$ over the small sign for $\overline{\text{𓂏}}$. In point of fact the $\overline{\text{𓂏}}$ does not project in the original so far forward as is shown in the transcription. The word seems entirely unknown, and 'recess' is a mere conjecture. [For $\overline{\text{𓂏}}$, not $\overline{\text{𓂏}}$ as in the Plate, see p. 192.]

2, 10. The determinative $\overline{\text{𓂏}}$ with old $\overline{\text{𓂏}}\overline{\text{𓂏}}$ 'back', 'end', is not rare at this period, but so abbreviated a writing as $\overline{\text{𓂏}}$ is not common; *cf.*, however, *Br. Mus.* 10383, 3, 7. $\overline{\text{𓂏}}\overline{\text{𓂏}}\overline{\text{𓂏}}\overline{\text{𓂏}}$ perhaps rather generally, not the name of a specific chamber; so, too, of the same king and queen *Abbott* 3, 4.

2, 10-11. $\overline{\text{𓂏}}\overline{\text{𓂏}}\overline{\text{𓂏}}\overline{\text{𓂏}}\overline{\text{𓂏}}\overline{\text{𓂏}}$ 'at the place of his side, i.e. 'beside him', or 'in his neighbourhood'. For *drw* see Peet's excellent note, but he wrongly renders $\overline{\text{𓂏}}$ 'its', as there is no masculine noun except 'this god' for the suffix to refer to.

The obvious restoration $\overline{\text{𓂏}}\overline{\text{𓂏}}\overline{\text{𓂏}}\overline{\text{𓂏}}\overline{\text{𓂏}}\overline{\text{𓂏}}$ escaped Peet, though he realized that a second passive participle must have followed *mk*. The fixed phrase *mkī hwi* or *hwi mkī*, to which Spiegelberg (*Rec. Trav.* 21, 44) first called attention, indicates protection against external interference, such as was accorded to the staffs of temples by royal decree, *e.g.* *Urk.* I, 287, 3; 289, 3; 307, 11; *Nauri* 26 and often. In *Abbott* 6, 6-7, it is said of the royal mummies $\overline{\text{𓂏}}\overline{\text{𓂏}}\overline{\text{𓂏}}\overline{\text{𓂏}}\overline{\text{𓂏}}\overline{\text{𓂏}}$ 'they are safe and are protected and guarded unto all eternity'. The present example differs, however, from all others by being followed by the instrumental $\overline{\text{𓂏}}\overline{\text{𓂏}}\overline{\text{𓂏}}\overline{\text{𓂏}}$, 'with (gypsum-)plaster'. One is reminded of the tomb of Tutankhamūn, where the entrance to the burial-chamber was in fact protected

¹ Quoted to me by Černý from Erman, *Zwei Aktenstücke aus d. theban. Gräberstadt*, in *Sitz. d. kön. preuss. Ak. d. Wissensch.*, 1910.

by a partition-wall built 'of dry masonry, bonded with heavy logs of wood, and covered on both sides with a coat of hard plaster' (Carter, *Tomb of Tutankhamen*, II, 41).

The description of this partition has been quoted in full as a prelude to the discussion of the next words $\text{𓂏𓂏} \text{𓂏} \text{𓂏} \text{𓂏} \text{𓂏}$, 'and covered with *hshš*'. The very term 'covered', which is nearly equivalent to 'hidden', and is used of parts of buildings covered by later encroachments (e.g. Borchardt, *Baugeschichte*, in Sethe, *Untersuchungen* 5, 41, 3), seems clearly to refer to something fortuitous that concealed the plaster facing of the burial-place. This something can only have been 'rubble' or 'sand'; and since *š* is the word for sand, the meaning of $\text{𓂏} \text{𓂏} \text{𓂏}$ must surely be 'rubble'; *Wb.* III, 339 rightly renders '*Schutt*'. We have encountered the word already in 2, 9.

2, 12. For the position of 𓂏𓂏 before *hpt-tl*, idiomatic in Late Egyptian, cf. $\text{𓂏𓂏} \text{𓂏} \text{𓂏}$ *Wenamün* 2, 62; *Mayer A*, 6, 13; *B*, 3, 14; $\text{𓂏𓂏} \text{𓂏} \text{𓂏}$ *Mayer A*, 1, 4; $\text{𓂏𓂏} \text{𓂏} \text{𓂏}$ *Wenamün* 2, 43-4.

$\text{𓂏𓂏} \text{𓂏} \text{𓂏} \text{𓂏} \text{𓂏} \text{𓂏} \text{𓂏}$ 'sarcophagi' . . . 'coffins'. See the valuable note by Winlock in this *Journal*, 10, 239, n. 2. He quotes a passage to show that the sarcophagi, though *dbwcy* here is determined with 𓂏 , may quite well have been of stone, and he rightly interprets the sentence to mean that the king and queen were each resting in an outer sarcophagus and an inner anthropoid coffin—though 'his coffins' in 2, 14-15, 16 suggests that the king had more than one. Winlock's further archaeological comments on the passage are of the highest interest. I refrain from repeating here all his valuable observations.

2, 12-13. $\text{𓂏𓂏} \text{𓂏} \text{𓂏} \text{𓂏} \text{𓂏}$. The tautology of demonstratives is characteristic of Late Egyptian (cf. below 2, 16, 19), but is abhorrent to English, and therefore not reproduced in the translation.

2, 13. $\text{𓂏} \text{𓂏} \text{𓂏} \text{𓂏} \text{𓂏} \text{𓂏} \text{𓂏}$. Here again no importance can be attached to the determinatives. Peet's 'equipped like a warrior (?)' is devoid of foundation, and *hps*, the usual determinative of which is 𓂏 , is best rendered 'falchion'; doubtless a dagger and not a sword is meant, though either might suit the archaeological evidence: see Winlock, *op. cit.*, p. 240.

$\text{𓂏𓂏} \text{𓂏} \text{𓂏}$. The writing certainly suggests 'eye-amulets', as Peet renders the word, and eye-amulets will undoubtedly have been included. But I prefer to render more generally 'amulets', there being a closely related word $\text{𓂏𓂏} \text{𓂏} \text{𓂏}$ *Wb.* I, 401, which designated amuletic jewels of various forms. $\text{𓂏} \text{𓂏} \text{𓂏}$, probably a spelling of older 𓂏𓂏 , will probably refer chiefly to the various necklaces.



2, 14. [On re-collation of the original the reading $\text{𓂏𓂏} \text{𓂏} \text{𓂏} \text{𓂏} \text{𓂏}$ *tptyw* emerged, see the Postscript, p. 193; Peet's rendering 'head-piece' is still possibly right.]


$\text{𓂏𓂏} \text{𓂏} \text{𓂏} \text{𓂏}$, being applied, as *Wb.* v, 499, informs us, to stone parts of buildings, ships, and staves, suggests covering with gold leaf. Perhaps the clerk who transcribed Amenpnüfer's evidence was here exaggerating, as Winlock suspects in the case of the inlaying of the coffins with precious stones mentioned in the next words.


2, 15. 𓂏 . The determination of this word with 𓂏 here, where it has the narrower sense of 'inlay' rather than its ordinary sense of 'fill', is worthy of note. Another way of putting the matter is to say that it has borrowed 𓂏 from the following $\text{𓂏} \text{𓂏} \text{𓂏}$; for such borrowing see my *Admonitions*, p. 41, note on 4, 14; *op. cit.*, 6, 5, 12.





$\text{𓂏} \text{𓂏} \text{𓂏} \text{𓂏}$. Peet, commenting on *Br. Mus. 10054*, rt. 1, 6 (p. 66), claims that this verb means 'to make away with' in the tomb-robbery texts, and quotes a number of examples. In every single one, so far as I can see, the meaning 'collect' is more appropriate. That is much the commonest sense of the word, as I first suspected in studying the inscription of Mes, see my edition, p. 19, n. 48. Besides the examples there quoted see *Blinding of Truth* 6, 1;







Thebes (cf. the title of Amennakhte in 1, 5), who got wind of the robberies and arrested Amenpnüfer.



3, 3. . Probably 'the office'; at all events not 'the house' of the mayor of Thebes, for which Pesüf himself uses the words  in *Abbott* 6, 1.

3, 4. The same scribe Khatemope is accused of the same offence by Amenpnüfer in *Br. Mus. 10054*, rt. 1, 11-12, but on that occasion he obtained only 4 kite of gold. We learn from *Abbott*, 6, 10 that there were two scribes of the quarter resident in Thebes proper, i.e. on the right bank ().

3, 5.  'compensated me'; perhaps nowhere else exactly as here, but the sense 'to pay in full' with object of the person is well known; see *ZAS* 43, 34, n. 26.

  , here contrasted with , occurs again in 3, 7 in a different context; the sense 'ordinary people', 'commoners', emerges clearly from both. As here, of the dead, cf. *Abbott* 4, 1; of the living as in 3, 7, cf. *Br. Mus. 10054*, vs. 2, 1; *10068*, 6, 12.

3, 7.   . Lit. 'they are companions, companions'. I take it that *sp* 2 is of vital importance in this context, and that, somewhat along the same lines as *καρξ νῦθεν ταίκαρξ ταίκαρξ αὐ τε* 1 Cor. xv. 39 means 'all flesh is not the same flesh', so *wndw wndw* signifies 'a party (just as we are) a party', i.e. 'are on the same footing as ourselves'. Whatever the linguistic analysis, the latter seems obviously the true sense. For , an old collective early written  = , see *Wb.* i, 326.

We have just encountered a case where the repetition of a word appears to stress the similarity of two compared things. Repetition may, however, also serve to indicate a *succession*. Thus in Coptic *ογα ογα (πογα πογα)* means 'one by one', 'one after another', 'each one'. Curiously enough,   immediately following in our papyrus provides a good example of the second development. The expression is to be read *prn-rn* and means 'name-list', 'roll-call', lit. 'name (by) name'. To the examples quoted by Peet, *Mayer Papyri*, p. 10, n. 1 add *Br. Mus. 10054*, vs. 2, 1; *10052*, 2, 1; 5, 12. Wrongly read in *Wb.* ii, 428, 20.

3, 8-15. The list of the thieves that follows repeats and to a small extent amplifies the particulars given in Amenpnüfer's testimony, but also serves to introduce the account (3, 16-19) of the examination and condemnation of his accomplices. The names are repeated yet again in the third and last section of our papyrus (4, 4-12), as well as in the narrative and the list of *Br. Mus. 10054* (vs. 1, 4-8; 5, 4-20). Only a few notes on the divergences of these lists will be given here, since lack of space prohibits a full treatment of the personalities involved in this complicated affair.

3, 11. The name of the father is omitted for later insertion when ascertained. A like omission occurs in 3, 14.

3, 13. The 'Island of Amenope' is mentioned again below, 4, 6, in *Br. Mus. 10054*, rt. 1, 6 and in *Br. Mus. 10052*, 10, 3. Of these passages, the second is the more informative. Amenpnüfer is there relating how he and his confederates plundered the tomb of the third priest of Amün, Tjanüfer. Amenpnüfer tells that 'we took his coffins to this boat, along with the rest, to the Island of Amenope'. Here it is fairly clearly implied that the thieves left the west bank to burn the coffins, so that the Island of Amenope must be either an island on the river or else on the east bank. I doubt if the literal sense of 'island' need be pressed, any more than its modern equivalent *gezira*. Indeed, there seems some indication that the Island of Amenope is simply a name of the cultivable lands round Karnak or between Karnak and Luxor. The name Amenope points in this direction, for it means the Amün of Ope, and the Southern Ope is Luxor. But further, the Amenemhab mentioned in 2, 2; 3, 13 and 4, 6 of our papyrus is elsewhere termed 'field-labourer of the House of Khons of Amün of Ope' (*Br. Mus. 10054*, vs. 5, 11; also the much later *Br. Mus. 10052*, 10, 1 and *Mayer A*, 3, 12, where a son of this

Amenemhab makes depositions). Now the temple of Khons thus mentioned must surely be that in Karnak, and this fact, coupled with the statement that Amenemhab was employed by the high-priest of Amūn, speaks eloquently in favour of the conjecture above expressed. Note that, whereas Amenemhab is usually called a 'field-labourer' or 'cultivator' ($\text{C} \text{e} \text{u} \text{h}$), he is described as an 'agent' or 'controller' ($\text{N} \text{u} \text{h}$) in 4, 6.

3, 18. $\text{N} \text{u} \text{h} \text{e} \text{u} \text{h} \text{e} \text{u} \text{h}$ 'pointed out', literally 'laid ... hand upon'. Cf. $\text{N} \text{u} \text{h} \text{e} \text{u} \text{h} \text{e} \text{u} \text{h}$ 'the two places which he pointed out', *Abbott*, *rt.* 5, 6; $\text{N} \text{u} \text{h} \text{e} \text{u} \text{h} \text{e} \text{u} \text{h}$ 'this house which I have pointed out to you', lit. 'which (I) have laid your hand upon them' *ib.* 5, 8. It is strange that in this phrase the hand in question should not be that of the indicator, but that of those to whom indication is made; grammatical analysis seems to make that inference certain. The omission of the suffix 1st pers. after $\text{N} \text{u} \text{h} \text{e} \text{u} \text{h}$ in the passage last quoted is not a serious difficulty, whereas to render 'this house pointed out by you' (passive participle with retained object) is in disagreement with the context, and would doubtless have been expressed by $\text{N} \text{u} \text{h} \text{e} \text{u} \text{h} \text{e} \text{u} \text{h} \text{e} \text{u} \text{h}$.

$\text{N} \text{u} \text{h} \text{e} \text{u} \text{h} \text{e} \text{u} \text{h} \text{e} \text{u} \text{h}$. See above on 1, 3.

3, 19. $\text{N} \text{u} \text{h} \text{e} \text{u} \text{h}$. I have rendered 'condemnation', not 'doom' as Peet did, partly because the word may not be identical with $\text{N} \text{u} \text{h} \text{e} \text{u} \text{h}$ (*Wb.* iv, 403 takes *šrw* and *šry* together), and partly because the 'punishment' of the criminals ($\text{N} \text{u} \text{h} \text{e} \text{u} \text{h} \text{e} \text{u} \text{h}$ *) was reserved for the decision of Pharaoh (4, 11). e of *šrw* is not quite certain, being partly in lacuna.

4, 1 ff. In this final section of the papyrus it was planned to record the arrangements made with regard to the individual thieves after their trial. There is one intrusive name, that of Shedsuany (4, 7), which will be discussed later. Of the eight thieves involved in the spoliation of the tomb of king Sebkemsaf only four are enumerated, the scribe having failed to complete his task.

$\text{N} \text{u} \text{h} \text{e} \text{u} \text{h}$ 'the Great Tribunal', see Peet, pp. 18-19.

4, 3. $\text{N} \text{u} \text{h} \text{e} \text{u} \text{h}$ lit. 'it was written for them', passive *šdm-f*; so, too, *Abbott*, 7, 16 in an exactly similar context. Peet (p. 44, n. 22) has rightly seen (though he expresses it rather ambiguously) that $\text{N} \text{u} \text{h} \text{e} \text{u} \text{h}$ does not refer to the judges who caused the record to be made, but to the thieves who (i.e. whose names) were written down. This is proved by the combined evidence of *Abbott* 6, 11, 12 (where the suffix of $\text{N} \text{u} \text{h} \text{e} \text{u} \text{h}$ refers to the 'great tales' told by the necropolis scribes), of *Brit. Mus.* 10068, *rt.* 6, 21, and of *Brit. Mus.* 10053, *vs.* 1, 9. The last passage is decisive: $\text{N} \text{u} \text{h} \text{e} \text{u} \text{h} \text{e} \text{u} \text{h} \text{e} \text{u} \text{h}$ 'he wrote down (lit. for) every theft he had committed'.

$\text{N} \text{u} \text{h} \text{e} \text{u} \text{h}$. In the corresponding passage of *Abbott* (7, 16) we read simply $\text{N} \text{u} \text{h} \text{e} \text{u} \text{h}$, which would pretty well suffice to show that the addition $\text{N} \text{u} \text{h} \text{e} \text{u} \text{h}$ is superfluous. I propose to interpret $\text{N} \text{u} \text{h} \text{e} \text{u} \text{h}$ alone as 'roll' and $\text{N} \text{u} \text{h} \text{e} \text{u} \text{h}$ as 'papyrus-roll'. $\text{N} \text{u} \text{h}$ is certainly a mistake for $\text{N} \text{u} \text{h}$, and this must be an abbreviation, not for *tmr* as it appears to be in $\text{N} \text{u} \text{h}$ (see my *Late-Egyptian Miscellanies*, p. 17a, l. 12 n.⁶), but for $\text{N} \text{u} \text{h}$ 'papyrus-book'. The proof involves a partial retraction of my remarks *Journal* 19, 26, n. 10, which were themselves a retraction of the attempt made by me in *Inscription of Mes*, p. 17, n. 32 to show that $\text{N} \text{u} \text{h}$ and $\text{N} \text{u} \text{h}$ are one and the same word. This now appears to be certain, for Černý quotes $\text{N} \text{u} \text{h} \text{e} \text{u} \text{h}$ $\text{N} \text{u} \text{h} \text{e} \text{u} \text{h}$ $\text{N} \text{u} \text{h} \text{e} \text{u} \text{h}$ $\text{N} \text{u} \text{h} \text{e} \text{u} \text{h}$ (*lege* $\text{N} \text{u} \text{h}$) in the Turin papyrus published *Journal* 13, Pl. 15, ll. 2-3. That passage in turn links

¹ $\text{N} \text{u} \text{h}$ is omitted, as often in these texts.

² Černý admits that the papyrus may have $\text{N} \text{u} \text{h}$ instead of $\text{N} \text{u} \text{h}$, since at that time he was wrongly, with the rest of Egyptologists, reading $\text{N} \text{u} \text{h}$ for $\text{N} \text{u} \text{h}$ in the expression $\text{N} \text{u} \text{h} \text{e} \text{u} \text{h}$. The writing $\text{N} \text{u} \text{h}$ in the Turin papyrus and in the passage here commented upon seems due to the influence of the said expression.

that if ever the history of this period comes to be written by some one thoroughly conversant with the persons mentioned in the trials, a number of details will appear in a somewhat different light. Close and prolonged study, however, would be required to bring about this result. For the moment all that seems possible is, after dealing with a few points of difficulty arising from the text of the Brussels portion of the *Amherst* papyrus, to weave into a consecutive narrative the new information afforded by that document.

The date of the 22nd day of the third month of inundation in the first line of *Pap. Leopold II* appears at first sight to be the actual date of Amenpnüfer's examination. A subsequent passage, however, offers an obstacle to this view. In 3, 16-18 it is recounted that after Amenpnüfer had made his confession his confederates were similarly tortured and told the same tale; and further that, obviously as a result of these proceedings, the vizier Khaemwese and the royal butler Nesamün had the thieves conveyed to the west bank on the 19th day of the said month, where they pointed out to those high dignitaries the royal pyramid that they had robbed. It seems quite impossible to invert the order of the occurrences, and consequently the confession of Amenpnüfer must have been made before or on the morning of the 19th. Following up this deduction, we observe that the first line of the papyrus does not use either of the expressions $\overline{\text{𓂏𓂏𓂏}}$ 'on this day' or $\overline{\text{𓂏𓂏}}$ 'day of' elsewhere employed to give precision to the occurrences of a given date. Hence it might seem necessary to conclude that the 22nd day mentioned in 1, 1 is simply the date of the writing of the papyrus, a conclusion which at all events is not in disagreement with the indications of 4, 1-3.¹

The question is, however, complicated by *Br. Mus. 10054*, which contains further confessions by Amenpnüfer, these dated, according to Peet's edition, on the 14th day of the month. Before putting the final touches to this article it seemed desirable to glance at the British Museum papyrus in the original. To my great surprise I found—and the reading was confirmed by Černý—that admirably as Peet had deciphered as much of the difficult hieratic narrative as I had time to collate, he had gone astray over the date in *vs. 1, 1*. This should read, not 'day 14', but 'day 19'. The new reading agrees pretty well with the *data* both of *Abbott* and of *Pap. Leopold II*. From the former (4, 9-10) we learn that there was a great round-up of tomb-robbers immediately after the tour of inspection on the 18th, and that these robbers were examined without delay either on the evening of the 18th or on the morning of the 19th—at all events before the visit of the vizier and the royal butler to the necropolis on the 19th. From *Pap. Leopold II*, as I have already pointed out, it is clear that Amenpnüfer had admitted his complicity in the Sebkemsaf affair before the afternoon of the 19th. It is true that the pyramid of Sebkemsaf is not mentioned in the rather disjointed confessions of Amenpnüfer dated to the 19th in *Brit. Mus. 10054*, but the combined evidence of all three sources makes it likely that the violation of the royal tomb was mentioned by him at the same time. Does this mean that we must acquiesce in the exceedingly awkward conclusion referred to above? That conclusion becomes the more awkward when we reflect that, if no trust can be placed in the dating of *Pap. Leopold II*, 1, 1 as referring to the examination and confession immediately following it, neither can any trust be placed in the dating of Amenpnüfer's confessions in *Br. Mus. 10054*, especially since these are introduced by almost identical phrases. Indeed, Egyptologists will be in a deplorable predicament if they can no longer have confidence that the dates at the heads of their documents were intended to intimate the exact dates of the events recorded therein. Fortunately there is a means of overcoming the difficulty which on consideration will appear, not merely plausible, but compelling. If we closely scrutinize 4, 1-3 of our papyrus, we shall see that the passage discloses a solemn session of the Great Tribunal on the 22nd, yet unless Amenpnüfer then

¹ [This and the next paragraph must be read in the light of the Postscript, below, p. 192].

made his detailed and formal confession, all that will have been enacted on that occasion will have been the handing over of the thieves to the high-priest. In 4, 3 it is stated that the proceedings of the session were recorded in writing, but there would have been next to nothing to record if Amenpnüfer's confession had not just taken place. The solution then is, if I see it aright, that Amenpnüfer confessed to robbing the pyramid-tomb of Sebkemsaf on *two* separate occasions: firstly before the visit of the vizier to the necropolis on the 19th, on this occasion perhaps only in a general and summary way; and secondly on the 22nd, when he gave a graphic and detailed description of his misdeeds to the high court. The *Abbott* papyrus provides us with a close analogy to this sequence of events in its references to the coppersmith Peikhal. That man is stated to have admitted thefts in the tomb of Queen Êse,¹ but on being taken across to the necropolis was unable to identify the tomb he had mentioned.² Notwithstanding this virtual demonstration of his innocence he was brought before the Great Tribunal again on the 21st, and on being questioned was seen to be wholly ignorant of the place he said he had robbed.³ The similarity of the procedure in both cases makes it practically certain that the date of Amenpnüfer's full confession was the 22nd, as indicated by our papyrus. It may be admitted that there is some ambiguity in the form in which the record of the trial is composed, but the solution of the problem here adopted fits in well with all the known facts.

I shall now endeavour to re-tell the story of this *cause célèbre* in my own way, down to the close of the trial of Amenpnüfer. The translations given by Peet and in the present article will enable the critically-minded to discriminate between what is established by actual documentary evidence and what is mere conjecture.

From the reign of Ramesses III onwards the state of Thebes had gone from bad to worse. That reign had witnessed strikes among the necropolis work-people, an extensive and dangerous harem conspiracy, and the invasion of the Delta by foreigners. Ramesses III was succeeded by a series of weak kings, who further impoverished Thebes by dwelling almost exclusively at one of the northern capitals. From time to time in the reign of Ramesses IX there were incursions of Libyans into the Thebaid, and for this and other reasons work in the necropolis was often at a standstill. Little wonder that the misery-stricken workpeople sought a remedy by plundering the ancient tombs in search of precious metal. In year 14 of Ramesses IX a coppersmith named Peikhal had been tried for that crime before the vizier of the day, but was apparently acquitted.⁴ According to the stone-mason Amenpnüfer's own confession, he started on his depredations in the previous year, but it may have been in year 14 or early in year 15 that he and his companions had the good fortune to chance upon the exceptionally rich tomb of King Sebkemsaf and his Queen Nubkhatas. A shorter account of the robbery of this Fourteenth Dynasty tomb relates that it

'... had been violated by the thieves by tunnelling through the end of his pyramid from the outer hall of the tomb of Nebamün, the overseer of the granary under King Menkheperre (i.e. Tuthmosis III). The burial-place of the king was found bereft of its lord, and likewise the burial-place of the great queen Nubkhatas, his queen, the thieves having laid hands upon them.'⁵

In 1898-9 Newberry and Spiegelberg, excavating on behalf of the Marquis of Northampton, thought to have found the actual tomb whence the thieves made their entry. But this tomb of a Nebamün was shown to be that of an 'overseer of the granary' only by some cones bearing that name and title which might well be strays from Tomb 231, less than one hundred yards away. Furthermore, the tunnel which Newberry found running beneath the pyramid supposed to be that of Sebkemsaf starts, not from the 'outer hall' as the papyrus

¹ *Abbott* 4, 13-17.

² *Ibid.* 5, 2-6.

³ *Ibid.* 7, 14-15.

⁴ *Ibid.* 4, 15-16.

⁵ *Ibid.* 3, 2-5.

states, but from the inner hall. And lastly, it is a curious fact that a number of different tombs are known to have existed belonging to Nebamūn who were 'overseers of the granary' or 'accountants of the grain of Amūn'.¹ For these reasons Winlock is sceptical of the proposed archaeological identification.²

We shall probably never know what motives induced Pesiūr, the mayor of the city of Thebes, to bring matters to a head at the beginning of year 16. Perhaps he felt that his official position was jeopardized by the open scandal of the tomb-robberies going on so near the seat of his authority. Conceivably also he was actuated by personal hostility to Pwerō, who was mayor of the west of Thebes where the necropolis lay. Or else, lastly, genuine indignation at the outrages and loyalty towards the absent Pharaoh may have been his inspiration. Whatever his grounds for taking action, it seems certain that Pesiūr gave the first impulse to the investigations carried on actively between the 18th and 22nd days of the third month of inundation. We have explicit evidence for the fact that it was he who alleged the violation of the tomb of Amenophis I.³ He again it was who accused the copper-smith Peikhāl and his two fellow workers of making thefts in the Place of Beauty, i.e. in the valley now known as the Tombs of the Queens.⁴ Nor can we have much doubt that Pesiūr was Amenpnūfer's accuser as regards the violation of the pyramid of Sebkemsaf. It may well be, indeed, that all the royal tombs subsequently examined by the commission were specified in the charges laid by Pesiūr before the vizier.⁵ Even so, he either kept in reserve for future use, or else became later acquainted with, five more items of information which he believed would prove highly damaging testimony against the workmen and officials of the necropolis.⁶

Pesiūr was *ex officio* a member of the Great Tribunal which sat at different places within the precincts of the temple of Karnak, but evidently he did not find much favour with his colleagues. Of these, the vizier Khatemwēse represented justice in the abstract, while the royal butlers Nesamūn and Neferkerētemperamūn may have owed their places on the court to their close connexion with the king. At the sessions on the 21st and 22nd, Amenhotpe, the high-priest of Amūn, was another prominent member, yielding precedence only to the vizier. Representatives of the army and the navy were, together with the second priest of Amūn, the remaining officials constituting the body usually referred to as 'the Great Notables'.⁷ These dignitaries appear to have been unanimous in resenting the aspersions implicitly cast upon the administration of Pwerō. It was probably in order to save Pwerō's face that he and his subordinate officers are stated both in *Abbott*⁸ and in *Pap. Leopold II*⁹ to have laid the information upon which the Great Tribunal proceeded to act. The first step taken by the magistrates was to send out a commission to visit all the tombs suspected of having been robbed. This commission, termed the 'controllers (*rudw*) of the great and noble necropolis',¹⁰ consisted of Pwerō himself, his subordinate police officers, some priests of

¹ To those mentioned in *JEA* 10, 241, n. 4 add the owner of the splendid paintings in the British Museum; see my remarks in Davies, *Ancient Egyptian Paintings*, III, 125, 126, 128. These paintings, however, appear to belong to the reign of Tuthmosis IV or later.

² *JEA*, loc. cit.

³ *Abbott* 1, 4-5.

⁴ *Ibid.* 7, 10-12.

⁵ Winlock thinks this probable, but Peet is of the opposite opinion (p. 30, n.).

⁶ *Abbott* 5, 16-18; 6, 9-11.

⁷ The full list, *Abbott* 7, 1-6.

⁸ *Abbott* 1, 7-8.

⁹ *Leop.* 1, 3-5.

¹⁰ *Hr* is a word for 'tomb' generally, see *Abbott* 4, 16; 5, 2. 3. *Pt hr* 'the tomb' *par excellence* means the tomb of the reigning Pharaoh, usually in course of construction during his lifetime. A fuller form of this specialized use is that here employed, and the fullest form of all occurs in *Abbott* 6, 15, translated below, p. 189 ll. 33-4. None the less it often seems imperative to render 'necropolis' in English if only for intelligibility's sake. In point of fact it does seem likely in some cases either that the entire necropolis was identified with the reigning Pharaoh's tomb, or else that *pt hr* was a name for Bibān el-Mulūk. The latter suggestion seems strongly favoured by *Abbott*, 6, 5, translated below, p. 189, l. 18.

the temple of Medīnet Habu, and the private secretaries of Nesamūn and Neferkerē'emperamūn respectively. Their tour of inspection occupied the greater part of the 18th, the report being rendered to the vizier and the Great Notables on the same afternoon. Out of ten royal tombs mentioned in the charges, only that of Sebkemsaf was found to have been plundered. The remainder were declared to be intact, including the tomb of Amenophis I, apparently the most important of those named in Pesiūr's accusations.¹ On the other hand, the tombs of two priestesses and those of many lesser persons were discovered to have been ransacked.² Pwerō and his colleagues had a list of known tomb-robbers hastily drawn up. About twenty-five men were mentioned in this, and as many of them as it was possible to lay hands on were immediately arrested and brought to trial. Among these were Amenpnūfer and several of his accomplices, probably also the coppersmith Peikhal and two other coppersmiths attached to the temple of Medīnet Habu, besides a certain Pekhihē, a coppersmith connected with the tomb of Pharaoh then in course of construction.³ The last-named thief had a gang of his own not connected with that of Amenpnūfer, except that the carpenter Setekhnakhte was a member of both.⁴ These people and others were rigorously beaten and their arms and legs twisted, after which they were ordered to confess their crimes. Amenpnūfer probably owned up at once to the violation of the pyramid of Sebekemsaf, and had in addition quite a long series of exploits to narrate.⁵ Unless the depositions reported in the papyri are faked, we cannot but marvel at the gusto with which Amenpnūfer recounts his thefts, these including the complete spoliation of the tomb of Tjanūfer, who was third priest of Amūn under Ramesses II, a tomb high up on the hill-side of Drā' Abu'l Naga that may still be visited.⁶ Pekhihē seems likewise to have scored some successes as a tomb-robber,⁷ while Peikhal, though not destined to obtain credence for his assertions, made the exciting disclosure that he had broken into the tomb of Queen Eše, the wife of Ramesses III.⁸

The revelations of this first examination pale, however, before Amenpnūfer's feat in plundering the tomb of King Sebkemsaf as narrated by him on the 22nd in the Great Tribunal. The story has been read in the translation given above, and need not be here repeated. Whether all the details emerged at Amenpnūfer's first questioning on the 19th

¹ Abbott 2, 1-3, 16.

² *Ibid.* 3, 17-4, 4.

³ For these thieves see the list in *Br. Mus. 10054*, vs. 5-6, probably the direct continuation of the confessions on the *recto*, since it is written the same way up at the end of the papyrus. A few names are lost, but even so it is quite evident that the list is incomplete. It does not contain three of Amenpnūfer's seven accomplices (see the table Peet, p. 47), nor yet Peikhal and his companions, nor yet Shedsuany, mentioned in *Pap. Leopold II*, 4, 7.

⁴ *Ibid.*, *rt.* 3, 2.

⁵ *Ibid.*, vs. 1, 4 ff. with *rt.* 1, 1-10; 2, 7-16. That *rt.* 1, 1-10 is to be assigned to Amenpnūfer is probable from the bribing of the scribe Kha'emope mentioned in l. 11, which links up with the similar episode related in *Pap. Leopold II*, 3, 4-5. No reference, however, is made to the pyramid of Sebkemsaf in *Br. Mus. 10054*.

⁶ It is no. 158 in Gardiner and Weigall, *Topographical Catalogue*.

⁷ *Ibid.*, *rt.* 3, 1-10, *cf.* also the evidence of the ferryman *rt.* 2, 1-6. One of the most perplexing difficulties in connexion with the tomb-robberies is the fact, much too little emphasized by Peet, that these same robberies are narrated just as though they were contemporary events in *Br. Mus. 10052*, 14, 10-18, in a deposition of the first year of the 'Renaissance'; *cf.* also Mayer A, 5, 9. The thieves in question are all mixed up with the accomplices of Amenpnūfer in the list of *Br. Mus. 10054*, *rt.* 5-6, so that one can have no doubt as to their date. Černý appears to be right in his view that the 'Renaissance' followed the 19th year of Ramesses XI, i.e. was more than twenty years later than the events recorded in *Pap. Leopold II* (ZÄS 65, 129). We must, therefore, conclude that the appearance of contemporaneity in the passage of *Br. Mus. 10052* is an illusion, and must assume that for some reason obscure to us the ancient history of the tomb-robberies was still of vital importance a generation later. Mayer A occasionally harks back to occurrences that happened long ago when the witness was a child, e.g. 2, 12; 10, 23. *Br. Mus. 10052*, 8, 19 mentions 'the times of Kha'emwese' as though they were at least some distance past.

⁸ Abbott 4, 16.

is perhaps doubtful, but enough will have come to light to cause a great sensation. The judges will have been particularly scandalized by the disclosure that Amenpnüfer had been arrested for this very crime a whole year earlier, but had escaped by bribing Khatemope, a scribe attached to the landing-place at Thebes. That corrupt official had succeeded in extracting from his victim as much as 20 *deben* of gold in respect of the pyramid of Sebkemsaf,¹ besides 4 *kite* of gold from the spoils of the tomb of Tjanüfer.² To ourselves *Pap. Leopold II* provides welcome illumination in the statement that subordinates of the mayor of Thebes had as early as this been taking a hand in combating the scandalous proceedings of the necropolis, and since Amenpnüfer was imprisoned in Pesiür's own office, it seems pretty certain that the latter had become cognizant of the Sebkemsaf affair a considerable time before he made up his mind to bring his accusations to the notice of the vizier. We see that at least some of Pesiür's charges were made with adequate knowledge of the truth. As for Amenpnüfer, on his return to the necropolis, he lost no time in resuming his old practices. Indeed, if the *procès-verbal* can be trusted, he seemed to glory in them, and had even the impudence to excuse himself on the ground that half the population on the west of Thebes were playing the same game.³

The inspection of the tombs themselves on the 18th had been a qualified success for Pwerto. Many of the most important charges made against the inhabitants of the necropolis were rebutted, though the violation of the tomb of Sebkemsaf proved incontestable, and now the coppersmith Peikhal added a new crime to the list by admitting that he had stolen objects from the tomb of Queen Eše. The vizier Khatemwēse and the royal butler Nesamün judged the situation sufficiently grave to feel the need of verifying the facts on the spot.⁴ It must have been the afternoon of the 19th when they crossed the river, accompanied by Amenpnüfer and his accomplices, as well as by the coppersmith Peikhal. The accused were of course held close prisoners, and Peikhal was blindfolded in addition. After Amenpnüfer and his gang had identified the pyramid of Sebkemsaf at Drä' Abu'l Naga,⁵ the procession moved southwards to the Tombs of the Queens.⁶ Here the bandage was removed from Peikhal's eyes. Though stimulated by another sound thrashing, this man proved unable to point to any place he had entered except an unoccupied tomb of certain children of Ramesses II and the hut of a workman named Amenemōne, son of Huy. After yet more bastinadoing, Peikhal solemnly swore that these open places were the only ones he knew.⁷ Such at least is the version that has come down to us, and it may possibly be correct. There are, however, certain suspicious circumstances. It is noticeable that Pesiür was not asked to accompany Khatemwēse and Nesamün, and it seems ominous that exactly fifteen months and a day later the vizier Khatemwēse, making a fresh investigation, found the very same tomb which Peikhal said he had plundered with its granite portcullis smashed to atoms and all its contents removed.⁸ We can read between the lines of *Abbott* that Khatemwēse and Nesamün were almost as pleased as Pwerto himself with the result of their investigations, for it is innocently stated that they 'caused the controllers and sergeants and work-people of the necropolis, together with the heads of police, policemen, and staff attached to the royal tomb, to go around the west of Thebes, making a great demonstration as far as the City.'⁹

¹ *Leop.* 3, 3-4.

² *Br. Mus.* 10054, rt. 1, 12.

³ *Leop.* 3, 5-7.

⁴ *Abbott* 4, 11 ff.

⁵ *Leop.* 3, 18. Cf. also *Abbott* 3, 5-7, where allusion is made by way of anticipation either to Amenpnüfer's first deposition early on the 19th or to his examination on the spot the same afternoon in the presence of the vizier.

⁶ *Abbott* 4, 17 ff.

⁷ *Abbott* 5, 7-8.

⁸ Pointed out by Peet, p. 34. See Botti and Peet, *Il Giornale della Necropoli*, Pl. 24.

⁹ *Abbott* 5, 10-11.

The sequel of this demonstration has provided one of the most graphic pages of authentic history that have come down to us from antiquity. It is little short of a marvel that after a lapse of more than three thousand years we should still be able to read the actual words bandied between the triumphant rabble of the necropolis and the sorely tried but not discomfited mayor of Thebes. The royal butler Nesamūn, perhaps anxious to preserve some appearance of impartiality, seems to have rushed over to Thebes to acquaint Pesiūr with the result of the inquiry.¹ Late in the evening these two officials fell in with the demonstrators near the temple of Ptah at Karnak. At the head of the work-people were the chief workman Userkhōpesh, the scribe Amennakhte and the workman Amenhotpe. Pesiūr started the uproar by angrily exclaiming, 'This demonstration that you have made to-day is no mere demonstration, but is a hymn of triumph on your part.'² You are rejoicing over me at the very door of my house. What means this, when I am the mayor of Thebes who reports to the Sovereign? If you are rejoicing over this place where you were in order to inspect it and which you found intact, none the less king Sebkemsaf and his royal wife Nubkhat's have been violated—he a great ruler who accomplished ten weighty commissions for this great god, Amenrēt-sonthēr, and his monuments remain in the god's innermost shrine down to the present day'.³ To this the chief workman Userkhōpesh retorted: 'All the kings together with their royal wives, mothers, and children that rest in the great noble necropolis, as well as those that rest in the Place of Beauty, are intact. They are safeguarded and protected to all eternity. The sage counsels of Pharaoh their child hold them in custody and try them severely'.⁴ Pesiūr rejoined 'Are you making a glorious thing out of all this?'⁵ Then he added that the necropolis-scribes Hārshire, son of Amennakhte, and Pebēs had come to him and had laid before him five pieces of information incriminating the workmen and disclosing robberies punishable with death. 'Concerning these', he added with many solemn oaths, 'I will write to Pharaoh, my lord, to cause people of his to be sent to deal with all of you'.⁷

Thus, so far from withdrawing his accusations, Pesiūr reaffirmed them and added new ones. What is more, he cast a reflection on the fairness of the Great Tribunal by swearing that he would appeal to Pharaoh over its head. All this was said in the presence of the royal butler Nesamūn,⁸ and the report of it soon reached the ears of Pwero, the mayor of the west.⁹ Thus attacked anew, Pwero spent part of the 20th in writing to the vizier a full report of the proceedings of the previous evening. After repeating the words that had passed between Pesiūr and Userkhōpesh, he concludes his letter as follows: 'I have received information about the accusations which the mayor of Thebes made to the people attached to the great and noble tomb of millions of years of Pharaoh on the west of Thebes, and I have reported them to my lord, since it would be a crime for one in my position to hear accusations and to conceal them. Now I do not know the purport of the great accusations which the mayor of Thebes said had been spoken of to him by the scribes of the tomb of the inner part¹⁰ who

¹ Cf. Abbott 5, 12 and 5, 21-2.

² *Ibid.* 5, 15.

³ *Ibid.* 6, 2-4.

⁴ *Ibid.* 6, 5 ff.

⁵ Lit. 'guard them and examine them rigorously'. It has not, I think, been noticed that these words are a sarcastic allusion to the imprisonments and bastinadoings undergone by the workpeople suspected of being thieves.

⁶ Lit. 'Are you making as high things this you speak of?' $\overline{\text{X}}$ is clearly the interrogative particle.

⁷ Abbott 5, 16-18 supplemented by *ibid.* 6, 9-14.

⁸ *Ibid.* 5, 21-2.

⁹ In *ibid.* 5, 21 Pwero seems to say that he himself had been present, but the impression thus given may be wrong since it is to some extent in conflict with 5, 13-14 and 6, 15.

¹⁰ This term requires further investigation. Can the addition 'of the inner part' refer simply to the fact that royal tombs at this period were in reality divided into two halves, the cult-temple being on the fringe of the cultivation, and the actual tomb far inland in the Valley of the Tombs of the Kings?

stand in the midst of the workpeople, for my legs cannot catch up with them. But I am reporting them to my lord, and my lord shall get to the bottom of these accusations about which the mayor of Thebes said that they had been spoken of to him by the scribes of the necropolis and that he would write to Pharaoh concerning them. It is a crime on the part of these two scribes of the necropolis that they should have approached the mayor of Thebes to lay information before him, for their fathers never did so, but laid information before the vizier when he was in the south country, and if he chanced to be in the north, the police and servants of His Majesty attached to the tomb sailed down with their documents to wherever the vizier was. I testify on the 20th day of the third month of inundation, in the sixteenth year, to the accusations which I have heard through the mayor of Thebes, and I am putting them before my lord in writing in order that one may get to the bottom of them by to-morrow'.¹

Thus the tacit hostility between the two mayors had at last broken out into open antagonism. The Great Tribunal dealt with the matter on the 21st, and at that session, if the *Abbott* papyrus reports the whole of it, only the question of Peikhal and of the two copper-smiths accused with him was discussed. The vizier Kha'emwëse animadverted severely on the conduct of Pesiür. He pointed out that the royal butler Nesamün and himself had personally investigated the charge concerning the tomb of Queen Èse, and that they had found the supposed thieves, on being taken to the spot, utterly unable to identify it. The three coppersmiths were in court; Kha'emwëse asked that they should be examined afresh. This was done, and they were acquitted. The mayor Pesiür, though himself a member of the court, was found in the wrong.²

It does not need much discernment to perceive that Pesiür's accusations could not be refuted by testing afresh merely the case of Peikhal. But the vizier seems to have thought that the mayor of Thebes stood in need of reproof, and this was the easiest means of administering it. There are a few words at the end of *Abbott* that make us wonder whether Peikhal and his companions were even then believed as innocent as they were declared to be: 'The Great Notables spared the lives³ of the coppersmiths of the temple of Ramesses III, and they were handed over to the high-priest of Amen-rê, king of the gods, Amenhotpe, on this day.' The last section of *Pap. Leopold II* suggests that handing over to the high-priest was tantamount to keeping men under arrest until their punishment should be decided.

Pesiür appears again as a member of the Great Tribunal on the 22nd, when the case of Amenpnüfer and his accomplices came up for reconsideration. Amenpnüfer must then doubtless have given that detailed account of his discovery and ransacking of the pyramid of Sebkemsaf which we read in *Pap. Leopold II*. At the end of the trial he and several others were surrendered to the high-priest until instructions should come from Pharaoh as to their punishment.⁴ This seems to have been by virtue of the old and humane law according to which Pharaoh alone had the right to authorize a criminal's death or mutilation.⁵ The condemnation of Amenpnüfer was far from being the end of the tomb-robberies trials, and these were indeed the constant preoccupation of Kha'emwëse and his successor for many years to come. Of Pesiür nothing further is heard, but we need not necessarily attach much importance to that fact, since our authorities seldom mention the mayors of the city of Thebes. Pwerto, the colleague of Pesiür in the West, continued in office for at least seventeen

¹ *Abbott* 6, 15-24.

² *Ibid.* 7, 8-15.

³ Lit. 'gave breath to', the phrase often used for setting prisoners at liberty or acquitting them. Is it to be taken more literally here?

⁴ *Leop.* 4, 11.

⁵ Newberry, *Life of Rekhmara*, 2, 12-13; cf. *Pap. Leningrad* 1116a, 48-50.

years longer.¹ Dr. Černý tells me that the scribe Harshire likewise kept his post, in spite of the indiscreet disclosures to Pesiūr for which Pwerto blamed him so bitterly.

In conclusion, a few words must be said about the manuscripts themselves which preserve to us the record of these stirring events. *Abbott* and *Pap. Leopold II* are magnificent documents obviously written by the same hand. Both are finely engrossed on fresh, unused papyrus intended to be inscribed on one side only.² One cannot doubt that they are genuine archives such as were stored in temples and public offices, and both the internal evidence of *Abbott* and a hint in the *Ambros* papyrus³ lead us to think that they once belonged to the records of the temple of Ramesses III at Medinet Habu. *Br. Mus. 10054* is very different. Alike in external appearance and in contents it suggests the very reverse of a formal official document. Peet's account⁴ of the papyrus is correct as far as it goes, but needs supplementing. The reason why the scribe started on the *verso* was doubtless that the *recto* was already occupied by another text. Having completed page 1 of the *verso* the scribe apparently washed away the superfluous matter on the *recto*, and then proceeded with his judicial records there. The date of year 18 in *rt. 3, 7* starts us wondering whether the whole contents of the papyrus are not later copies. The composition is as scrappy as that of *Mayer A*, and the handwriting gives both Černý and myself the impression of being one and the same throughout and more akin to that of the scribes who wrote at the time of the 'Renaissance' than to that of the scribes under Ramesses IX. Against this must be set the fact that notes of an obviously secondary character are marked against the individual names in the list of thieves of *cs. 5-6* to signify whether the persons in question had been arrested or not, and this would be natural only if the list in question were contemporary or nearly so with the events recorded. As regards the historical value of the three papyri, I am strongly of opinion that these are faithful accounts of what actually occurred. Peet's verdict⁵ that the *Abbott* papyrus is a highly biased statement written from Pwerto's point of view seems due to a confusion of thought. Had *Abbott* been really partial, would it have displayed its partiality so patently? My point is this: we gain a shrewd suspicion from *Abbott* that the vizier and the entire Great Tribunal were strong partisans of Pwerto. None the less, a very full report is given in that papyrus of Pesiūr's statements to the people of the necropolis, and the gravity of the crime against the pyramid of Sebkemsaf is as little underestimated in *Abbott* as it is in *Pap. Leopold II*—the work, be it remembered, of the same scribe. If *Abbott* fails to mention the visit of the vizier to that pyramid on the 19th it is because this all-important matter was to be treated in a complementary papyrus, *Abbott* being concerned almost exclusively with the charges made by Pesiūr and with the invalidity of some of them. In a word, *Abbott* does reveal to us a highly biased state of feeling against Pesiūr and in favour of Pwerto, but that state of feeling is imparted in a very fair and candid fashion. The same confidence which we repose, accordingly, in the *Abbott* papyrus as a trustworthy historical record can obviously also be reposed in *Pap. Leopold II*, though no one in the world will ever be in a position to tell us how far Amenpnūfer, in his confessions, was telling the truth.

¹ Peet found him mentioned as still in office in the 12th year of Ramesses XI, see *Journal* 14, 65.

² The entries on the *verso* of *Abbott* are of much later date.

³ Peet, p. 178. See, too, Winlock's remarks in *JEA* 10, 221, n. 7.

⁴ Peet, pp. 53 ff.

⁵ *Op. cit.*, pp. 32 ff.

SUMMARY REPORT ON THE EXCAVATIONS AT TELL EL-'AMARNAH, 1935-1936

By J. D. S. PENDLEBURY

With Plates xvii-xx

THE season lasted from November 18 to February 12. The staff consisted of Messrs. Pendlebury, Fairman, and Lavers, together with two new-comers to the site—Messrs. T. W. Thacker and G. Rudnitsky.

Support was received from the Brooklyn Museum, New York, from Mrs. Hubbard, from San Diego, California, and from the Ashmolean Museum, Oxford, as well as from many generous private contributors, while an unexpected donation from Boston at the end of the season enabled the work to be brought to a neat conclusion.

For the second successive year the Great Palace was the main objective. During the previous season (1934-5) the Harem quarters, which had originally contained the famous painted pavement, were re-excavated; part of the Broad Hall was cleared and also, towards the north end, a confusing mass of foundations at a low level which had supported a building known as the *Weben-Aten* (see *Journal* 21, 129 ff.). It was these foundations which claimed our first attention. Unfortunately it was soon discovered that their limit had been reached without any further clue to their object being obtained. All that can therefore be said is that since they lie on the main axis of the Palace, and since they represent some important structure, the *Weben-Aten* may have been something in the nature of a gigantic entrance to the state halls and colonnades to be described below.

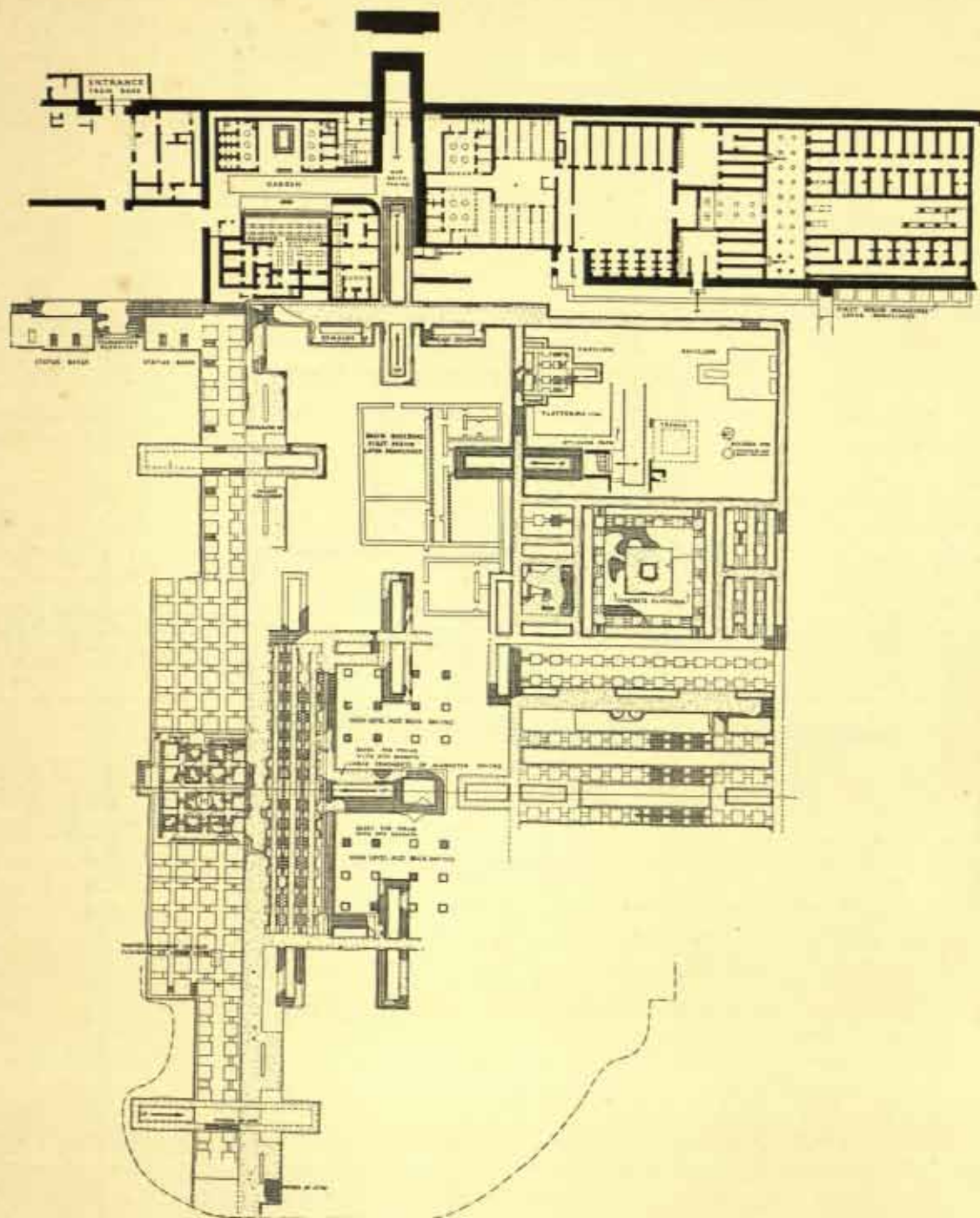
A number of trial-pieces were discovered in the wall-trenches; the finest of these is shown in Pl. xx, 2. But the most curious find was a sherd of predynastic black-topped ware from the filling between two walls.

The main part of the Palace is shown in Pls. xvii, xviii. Here, as elsewhere, all the stone had been taken, leaving at best the marks in the plaster in which the foundations had been set, at worst nothing but a shallow trench in the virgin soil.

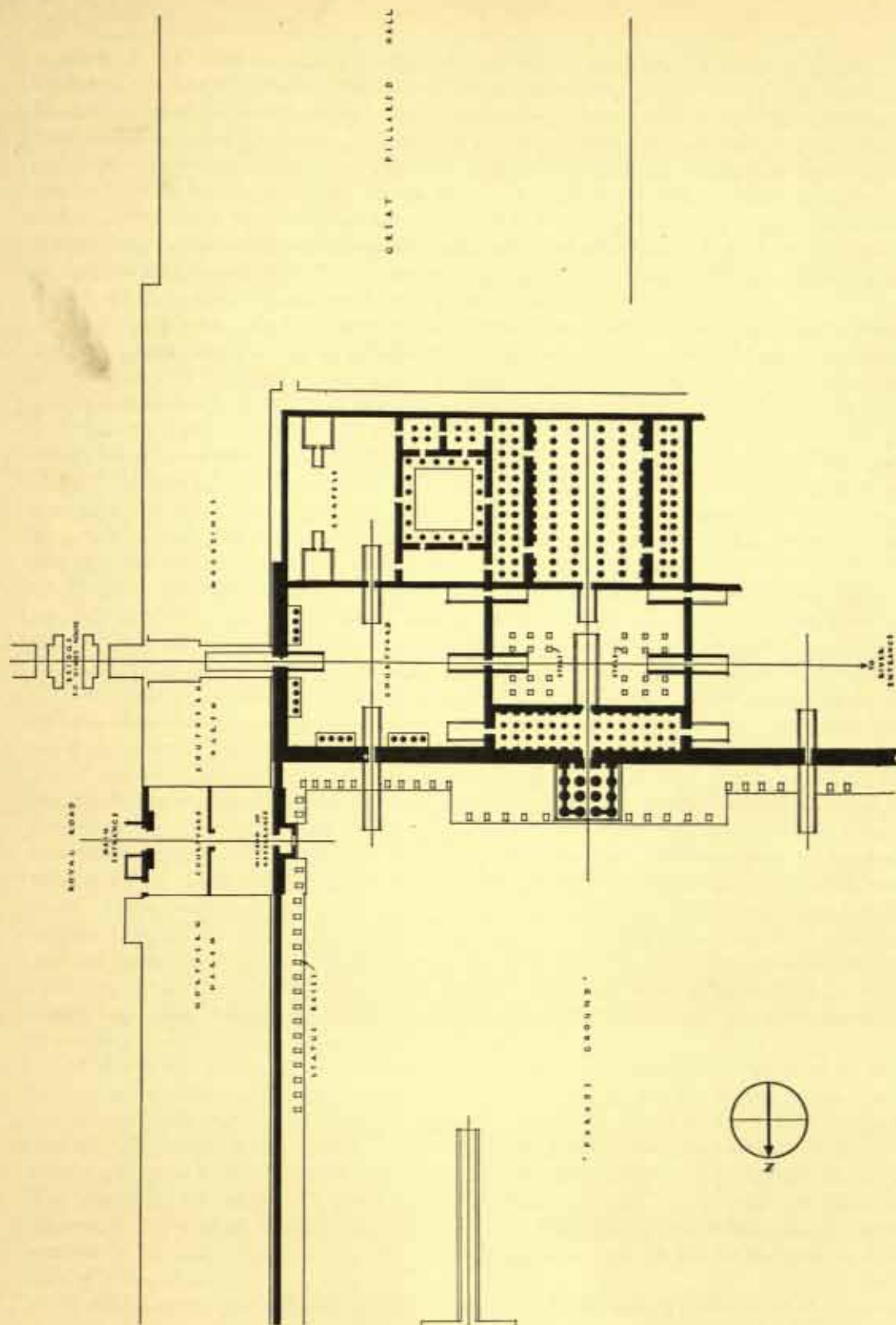
The Broad Hall, which perhaps surrounded, perhaps included, the big 'parade ground', was first cleared. It very soon became evident that it had never been finished in accordance with the original project, for while most of the oblongs marked in the plaster and showing the setting-out of the colossal statues had clearly been built over, none of the big squares which represented the positions of columns showed any trace of stone-marks; while in the centre a colonnade, or rather pavilion, had evidently been set up, whose columns had not kept strictly to the plotting on the original plan.

It would seem that this ambitious scheme of a colonnade 200 metres long failed, probably owing to the great expense, and that Akhenaten had to content himself with a central pavilion acting as entrance on the main axis, and had to leave the rest as an open court surrounded by colossi.

An interesting structural feature came to light. The plaster floors, which were common not only in the palace, but also in the Great Temple and the *Hat-Aten*, had always been a source of speculation. Not only were they uneven—that might have been caused by



Existing remains of the Palace
EXCAVATIONS AT TELL EL-'AMARNAH, 1935-6



Restored plan of the Palace
EXCAVATIONS AT TELL EL-'AMARNAH, 1935-6

weathering—but they seemed carelessly laid, and were in any case of a material unsuitable for floors. Mr. Lavers therefore put forward the theory that they were merely a preliminary flooding of the whole area on which to mark out proposed details of plan, and that the actual floor was at a higher level. The objection to this was that no trace of such a higher floor had ever been found, though this might be answered by pointing to the thoroughness of the destruction, which would have involved the breaking through of the floors in search of stone. Fortunately, however, a day after this idea had been put forward, a complete section of the postulated flooring was discovered about 80 cm. above the plaster, the intervening space being filled with clean sand. That it was contemporary was proved by traces of painting in a typical panel-pattern being found on the mud (not mud-brick) floor.

Besides the main axis from north to south in the centre, two minor approaches crossed the Broad Hall, fragments of their balustrades being found. The pavilion was adorned with a central row of columns in hard white limestone. These were decorated with reliefs so lightly and sketchily incised that it almost seems that the columns had been plastered over and that the incision is the result of the chisel going too deep. Such fine stone, however, would never have been plastered. Another possibility is that we have only the preliminary sketch. Against this, however, is the fact that a great number of other reliefs in sandstone, quartzite, and granite were equally lightly incised. The outer rows seem to have been joined by a screen wall, for a uraeus cornice continuing round a semicircle was found. These columns were of sandstone, with palm-frond capitals brightly painted.

Pl. xx, 3 shows a fragment of relief from the Broad Hall. It is an exceptionally fine example of the technique of painting transferred into stone. The ear of bearded wheat is unusual, and the whole seems much more suited to a fresco or a painted pavement.

South of the Broad Hall existed a long colonnade at a higher level. A view of this from the west is shown on Pl. xix, 1. From east and west it was approached by ramps, which led up from the courts served by the flanking entrances from the Broad Hall. The plaster was exceptionally well preserved here, and clearly shows the square foundations of the columns, joined below the floor by short walls which gave stability to the whole. From this colonnade a ramp descended into a central open court, paved with brick in which were inset twenty-four slabs of plaster, each with marks of blocks upon it. From the number of fragments of stelae in alabaster and quartzite it is evident that these were the foundations for a forest of such stelae. Beneath each one was a pit, some two metres deep, lined with brick and stone. From their position on the main axis these pits had obviously been intended to contain foundation deposits, and since no less than eight were still sealed over by the plaster and had never been touched, our hopes ran high. After many hours of cramped excavation, however, it was found that in only one pit were there any objects. Since that pit contained only a rude caricature of the king on a potsherd it cannot be said that our knowledge of foundation-ceremonies at this period has been increased.

At this point the second axis crosses the first. From west to east ran a series of sloping approaches similar to the main axis and leading from the river-front shown in the tomb pictures to the bridge which leads over the Sikket es-Sultān to the Royal House (Petrie's No. 13). The bridge itself had been partly excavated in 1932, when the evidence of painted plaster had gone to show that above it was a window of appearance (see *Journal* 18, 148). The palace abutment, however, was devoid of remains of painting, though a number of fragments of sculpture showed that it had been equally highly decorated. The various periods of building which careful study brought to light will be fully discussed in *The City of Akhenaten*, III.

It will be as well to state here that the hopes, built on experience with the Great Temple,

that the pictures in the tombs would throw light on the use of various parts of the Great Palace were doomed to failure. The centre of the picture is always the Window of Appearance over the bridge, but so vast was the complex of buildings that the artist had to make a selection of the rooms he represented. The Great Temple was not only a new departure in architecture, but it was simple in plan and capable of being represented easily in the Egyptian draughtsman's conventions. With the Palace, on the other hand, he had a bewildering series of courts and halls which not only were difficult to draw but which in most cases he had probably never entered. Except in a very few cases, therefore, the tomb-pictures are of no assistance.

In approaching the area to the south of the open court, a few words about its construction are advisable. Pl. xix, 2 shows a general view from the south. Here appearances are deceptive. What seem to be corridors are actually trenches for the foundations of walls and colonnades, while the apparent walls are actually the filling below the floor-level. In this part of the Palace the scaffolding (shown in section in Pl. xix, 3) was partly retained to raise the level of the floors. This scaffolding, as the photograph shows, consisted of clean sand, bits of broken brick, chips of stone, and builders' waste. It is noteworthy that immediately below the level of the floor the chips of stone usually increased in quantity, owing to the necessity of facing the stone properly where it would be seen. Furthermore, at irregular intervals are the layers of mortar marking the varying level at which the builders stood to set the stones in position.

The whole of this area had been used as a mixing-floor while the Broad Hall was being built, and a layer of cement and mortar of varying thickness extends over the virgin soil at this point. At one spot two brick containers for mixing mortar survive below the scaffolding, while at another a complete plaster bath exists with steps on which the hodsmen could stand.

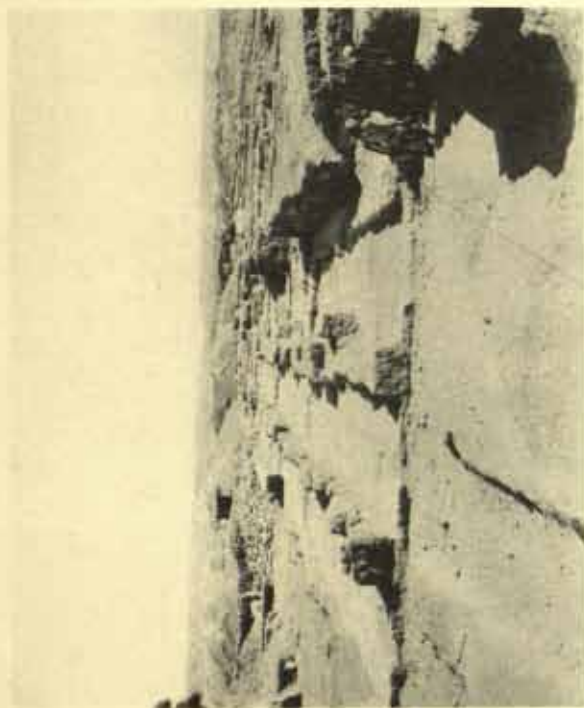
The great Hypostyle Hall ends suddenly, and, destroyed as it is, there is no indication of any throne or culmination for the magnificent series of buildings.

It is only to the east of the main axis that the building has been completely cleared, and it is extremely fortunate that enough room exists to the west before the modern cultivation begins, for much of it is inexplicable. To the south are two rooms, each containing four columns. That is simple. Then comes a great platform of concrete in a hollow square, surrounded by colonnades and having traces of foundations in the middle. The only possible explanation seems to be that flights of steps descended from the higher halls surrounding, and that perhaps a sunk garden with a fountain existed in the centre. North of this are structures which as yet we do not dare to interpret.

East of this again seems to have been an open court containing perhaps gardens, the exact lay-out of which we must hope to find in the corresponding area west of the axis. There were also two chapels or pavilions, the northern of which had been practically finished, as could be seen by the unfinished capitals which were found here, while the southern had not yet even been properly plotted. It is probable that the columns were to have been of the vine-leaf pattern shown in Petrie, *Tell el Amarna*, Pl. viii, for quantities of fragments were found.

To the south of the state apartments lay a sunken area which had undoubtedly been filled in at one time to bring it up to the same level. A feature of this part of the Palace was the number of plaster moulds for hieroglyphs, which had evidently been distributed among the semi-skilled workmen who had to be employed owing to the great activity in building.

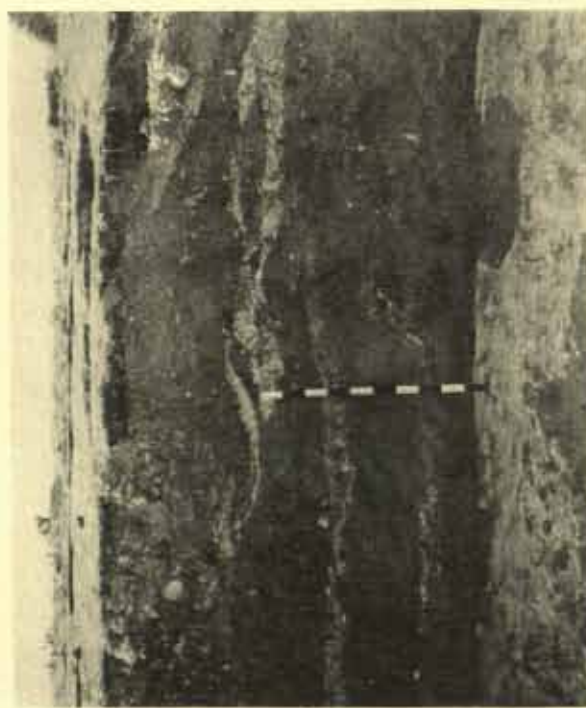
A great quantity of relief work was found in the southern part of the Palace, one of the



1. Colonnade south of the Broad Hall, from the west



2. General view of the palace from the south



3. Scaffolding retained as filling below a floor



4. The small Harem from the north

most interesting pieces of which is shown in Pl. xx, 4. It is part of an anta cap or of a 'broken lintel' in sandstone, and is carved on both sides with a human-handed sphinx. Another interesting piece shows the upper part of a princess 'kowtowing'. Only one example of this practice on the part of the royal family has hitherto come to light—a stela in the Cairo Museum, probably from Heliopolis. On the top register of this the king, the queen, and the two princesses then born have thrown themselves on to their knees in an ecstasy of adoration in front of the Aten, while in the bottom register they are all flat on their faces. Perhaps an explanation is to be sought in Akhenaten's desire for support by all sun-worshippers at the beginning of his revolt, and the necessity for showing his fanatical devotion. That devotion evidently did not last long.

The eastern side of the Palace is occupied by buildings of mud-brick. South of the main Harem is an entrance, and south of that again is a group of buildings (Pl. xix, 4) which show every sign of having been a harem also. Not only has every room and corridor had a painted pavement, as in the main Harem, but the decoration of the columns is identical. The plan is similar, with a garden and pond surrounded by colonnades, and one may well believe that it served as the private apartments of the eldest princess.

Both here and in the magazines to be described below were found pits containing the skulls and other bones of cats and dogs—evidently harem pets. These are the subject of study by Dr. L. Keimer, of the Agricultural Museum in Cairo.

A number of pieces of inlay in various materials were found. Pl. xx, 1 shows those in stone. The two hands come from the ends of Aten rays. The calf's head on the left is in yellow sandstone, while that on the right is in black limestone and has at some time been used as a pendant. Magnificently coloured fragments of faience came to light, the most exquisite of which showed the head of a duck and a butterfly, the latter a very rare subject in faience.

South of the bridge lie long rows of magazines, partly demolished and replanned when the state apartments were built. The various periods are too complicated to admit of a summary description.

Further research in the great pillared halls to the south, re-excavated during the previous season, failed to produce any more examples of stamped bricks. But the few then recovered mentioning the name of Smenkhkarē, together with the clear proof that these halls were later additions to the Palace, confirms us in our theory that they formed a great coronation hall set up for the ceremony of Smenkhkarē's association with Akhenaten as coregent.

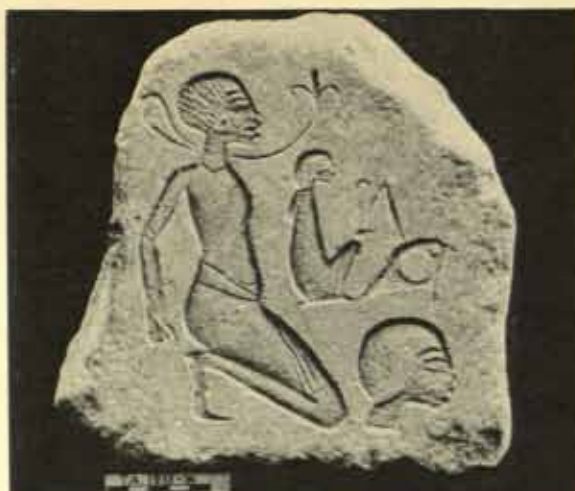
Finally, at the end of the season, when a clear survey had been made of the area west of the axis, an attempt was made to find the north entrance to the Palace. The eastern enceinte-wall was traced for some hundreds of metres north of the main Harem, where unfortunately it tailed off. Some way farther north the cultivation recedes in one of the big bays in which concrete foundations are usually found, and tests were made. Unfortunately the cause of this bay seems to have been an accumulation of wind-blown sand, but at a spot close to that marked 'Ushabtis' on Petrie's plan, *op. cit.*, Pl. xxxv (this is now below the encroaching cultivation), was found what must have been a sculptor's floor, evidently part of the same quarter in which Petrie states that he found fragments of relief to be fitted into the walls of tombs. Here lay two unfinished *shawabtis* and a *peseshkef* ('Opening the Mouth' implement) in granite. Close by was an unfinished group of monkeys in a chariot, no doubt intended to be the same sort of toy as that found by Frankfort in the north suburb (*The City of Akhenaten*, II, Pl. xxxi, 4; p. 84). The unfinished head of the king in limestone, shown in Pl. xx, 5 was also found here.

But the most important piece of all is shown on Pl. xx, 6. It consists of the hands and

forearms holding an offering-table broken off a nearly life-size statue in limestone. Not only are the hands of exquisite workmanship but the inscription is of the utmost interest. It gives the names of Akhenaten, of his father Amenhotpe III, and of the Aten in the later form current only after the ninth year of Akhenaten's reign. Thus it lines up with at least two other objects, the stela found by Griffith and the granite bowl from the 'altars' published in *The City of Akhenaten*, II, Pl. xlvii, 2; pp. 101, 108. These objects must surely imply a coregency at least eight years long of Akhenaten and his father. Further, at the tomb of Huya the façade, the first part to be carved, shows on one side Amenhotpe III and Teye, on the other side Akhenaten and Nefretiti, again in conjunction with the later form of the Aten name. There is no distinction between the two groups, that is to say it is not a case of the living on one side and the dead on the other. Now inside the tomb is shown a visit of Teye *alone* to 'Amarnah in the twelfth year of Akhenaten's reign. Surely that seems to imply the death of Amenhotpe III between the carving of the façade and of the interior, and suggests that Teye's visit was in the nature of a state 'progress' to her son on the occasion of his father's death. Now if we allow a coregency of eleven years, it means that Akhenaten ruled alone for seven years only, and this will allow Tut'ankhaten, who ascended the throne at the age of about nine, to be the son of Amenhotpe III, which is also implied by his looks, by his own statement (cf. Breasted, *Anc. Records*, II, 896), and by the presence in his tomb of a statuette of Amenhotpe III in the same 'coffinette' as a lock of Teye's hair.



1. Inlays, mainly from the small Harem



2. Quartzite trial-piece from the *Weben-Aten*



3. Limestone sunk relief from the Broad Hall



4. Sandstone anta cap, from the Palace, south end



5. Unfinished limestone head of the King, from the Palace, north end



6. Inscribed offering-table from a limestone statue, from the Palace, north end

PRELIMINARY REPORT OF THE OXFORD UNIVERSITY EXCAVATIONS AT KAWA, 1935-1936

By L. P. KIRWAN

With Plates xxi-xxiii

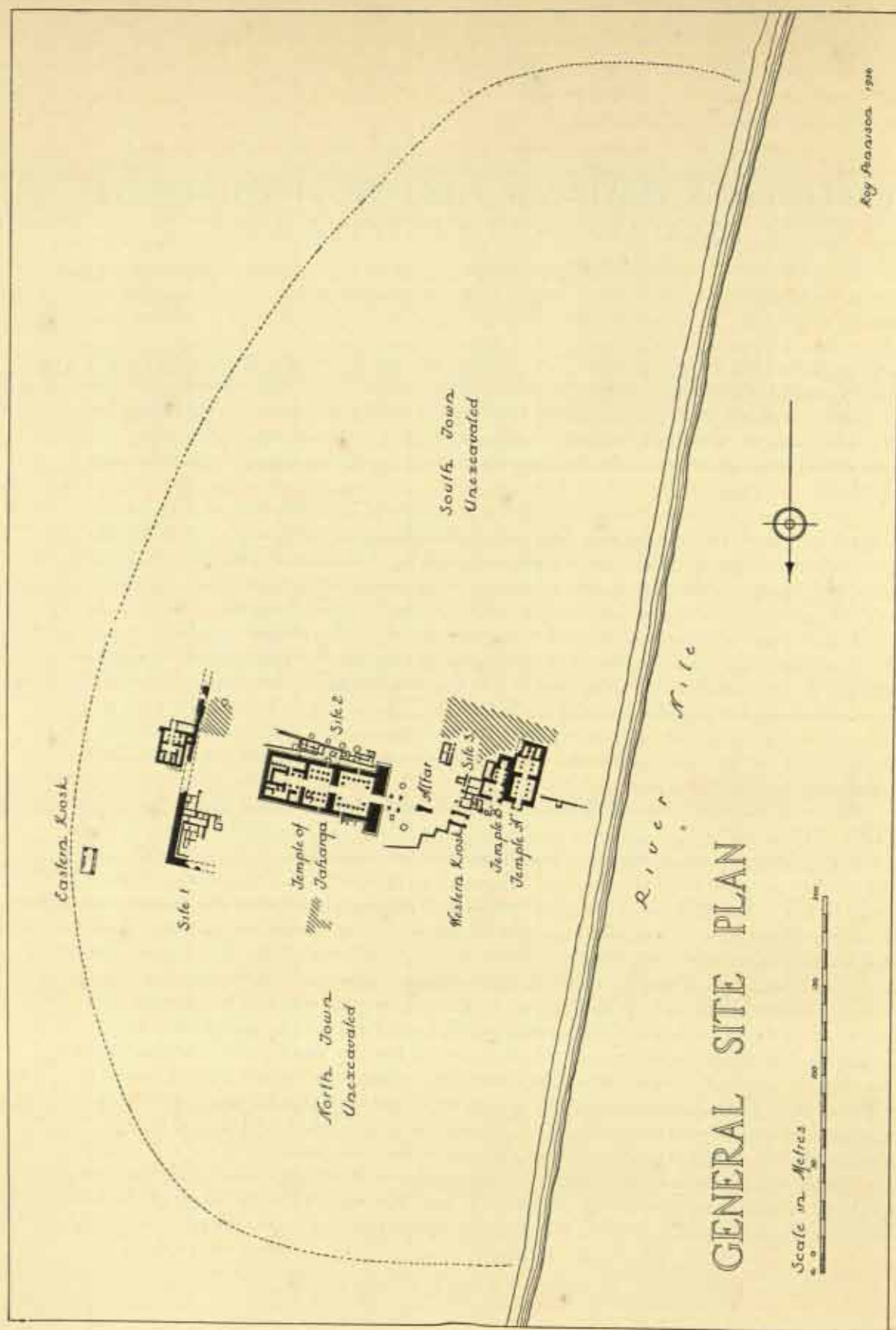
IN November 1930 the late Professor F. Ll. Griffith and Mrs. Griffith, assisted by Mr. Charles Little, began the excavation of the extensive ancient site at Kawa. The remarkable results of the first season's work—including the discovery of three temples with several other important buildings, a mass of antiquities, and a number of new and important texts—have established the existence at Kawa of an ancient city second only in importance (in the Sudan) to Napata.

Through lack of time Professor Griffith was unable to complete the excavation and recording of the Temple Area that year, and he had intended to return to Kawa for this purpose another season. The excavations conducted by the writer in 1935-6 were due to a request by Mrs. Griffith that this additional work should be done so that the results might be incorporated in the forthcoming report on the temples at Kawa.

A short report on the first season's work was published by Professor Griffith in *Sudan Notes and Records*,¹ while another and more detailed account was prepared as a guide for visitors to the Exhibition of Antiquities at The Queen's College, Oxford, in the autumn of 1931. Since neither of these publications is now easily accessible, it has been thought well to preface this account of last season's work by verbatim extracts from Professor Griffith's pamphlet of 1931, so that the general results of the work of both seasons may be available together.

The existence of a temple at Kawa, on the east bank of the Nile and four to five miles north of the town of New Dongola on the opposite bank, was recognized as long ago as 1884. . . . Several stone monuments from Kawa were in the collection of the late General Sir Herbert Jackson, when Governor of Dongola Province, in his fine residence at Merowe, and are now in the Museum at the same place; but, although portions of the temple were disinterred from time to time and exposed to depredations by the natives, nothing certain was known of the history of the site until the beginning of 1929, when Mr. Wordsworth, District Commissioner at Dongola, aided Mr. F. Addison, Conservator of Antiquities in the Sudan, to uncover some of the walls. Thereby the Conservator was able to establish three important facts, namely, that the king who built the principal temple was Tirhaqa, that he dedicated it to the god Ammon, and that the name of the city was Gematen or Gempaten. Mr. Addison also made a rapid plan of the scanty ruins that were visible and took measures for their preservation. Following closely on this, we visited the site in February, 1930, under the auspices of the Governor, Mr. A. B. B. Howell (of New College), and instituted a short exploratory dig of nine days. In this we partially cleared the chambers at the east end of the temple of Tirhaqa, and established the fact that a second temple existed at right angles to the first, with the cartouches of Ramesses II and Ramesses VI engraved on one of its columns. We determined if possible to complete the clearance in the next winter, and issued

¹ 14 (1931), 87-9.



an appeal for subscriptions to the revived "Oxford Excavations". . . . The Expedition assembled at Kawa on November 22nd, 1930. . . .

'The chief results are as follows: Two temples, "A" and "B", lay parallel to the river with axes north to south so close to each other that the walls touched.¹ They were built of crude brick, the walls of the courts plastered and painted, the stone gateways of "A" built by Tirhaqa, but the stone shrine, still covered by its roofing blocks, much older and sculptured by Tutenkhamūn, by whom also the fluted columns of the inner court were set up. "B", likewise with gateways, columns and shrine of stone, gave us little inscription, but one of the columns in the inner court bore the cartouches of Shabako "beloved of Anukis", and two others the names of the Nubian King Harsiotef. The interior of the shrine was elaborately sculptured in late Nubian or Meroitic style and had been entirely covered with gilding. The entrances to "A" and "B" were side by side, opening at right angles on to the approach to the Tirhaqa temple "T".

'The axis of "T" lay from east to west, and its buildings ceased riverwards just before the entrance of "B" was reached. The first building in this axis was a small "Kiosk" in which processions could form and prepare: eastward of the Kiosk stood a stairway leading up to a large sacrificial platform, and beyond this were four stands facing each other in pairs, the second pair surmounted by granite criosphinxes with small figures of Tirhaqa beneath their chins. Further east again rose the ruined towers of the First Pylon forming the west wall of the first court, the roof of which was upheld by massive columns. On the inner faces of the towers Tirhaqa is sculptured as a majestic sphinx attacking and trampling on his Libyan and Asiatic enemies, while specimens of the loot of cattle and human prisoners stand about, and kings and chiefs signify submission by their attitudes. Leaning against the walls below these scenes were three massive granite stelae, one of them dated in Tirhaqa's tenth year, the others giving statistics of his annual gifts during seven and four years respectively. At the opposite (east) end of the court stood two more criosphinxes of Tirhaqa and four great stelae, one dated in his sixth year, two commemorating his piety but undated, and one telling of his fourth successor, Aneraman. Behind the second pylon lay the Second Court, the walls of which were sculptured in fine relief with the representation of a great procession, in which the king with his courtiers, musicians and attendants meets a procession of priests from the temple carrying the sacred barque. On the east wall here, below the sculpture, was engraved a huge inscription of 126 lines commemorating a late and obscure king named Amenhinearok. In the north-east section of the second court was a small chamber of Tirhaqa finely sculptured on the outside but plain within, and the north-east corner was divided off by a wall of King Aspert, Tirhaqa's fifth successor (according to Dr. Reisner's reconstruction of the Dynasty).

'Behind the courts lay the sanctuary itself completely defaced and surrounded by much-ruined chambers. The most interesting of these was a narrow court on the south, with roofed colonnade along its north side. At its west end was a platform, reached by a few steps, on and about which stood granite statuary of Tirhaqa. Here we found a headless statue of the King, a small but perfect sphinx with excellent portrait head, two apes adoring the Sun-god, as well as a small model in limestone of the platform and the staircase. On the walls were remains of excellent sculpture, a hieroglyphic graffito of King Harsiotef and a number of obscure graffiti in Meroitic writing.

'Beyond the east end of the temple we found remains of a large house, partly built of stone, containing antiquities of the age of Augustus, including a bronze Zeus (?) of Syrian

¹ See General Site Plan, p. 200. The hatching on this plan indicates mud-brick buildings almost totally destroyed by *sabbākhin*.

type and a Hellenistic figure of a girl in ivory. Beyond this again were the ruins of a second kiosk on a road running north and south behind the town.

'Our general conclusions were these: that the large city of Gempaten, the site of which is now entirely desert, had been built along the Nile bank with rich cornfields and plantations stretching eastwards where now all is sand. Probably it had a long history from the earliest days of Egyptian colonisation, but this history was broken entirely by the Hyksos tyranny and by evil times at the end of the Middle Kingdom. The Pharaohs of the Eighteenth Dynasty had to start again from the beginning in founding the New Empire and colonising its dependencies. Amenhotp III (represented by part of a sphinx and a large scarab from a foundation deposit) re-created Kawa, gave to it the name Gempaten, and dedicated it to Ammon, the imperial god of Thebes, here identified with the ram-headed god Khnum of the First Cataract. The heretic monotheist, Akhenaten, following him, destroyed the Ammon temple of his father, but Tutenkhamūn restored it as the beginning of Temple "A", almost on the same site. The final destruction of the Temples and abandonment of the city was probably due to the avenging army of Petronius in 23 B.C. during the reign of Augustus.

'In the temples we did not fail to discover small antiquities. The royal foundation deposits which we had expected to find indeed turned out either despicably poor or were entirely wanting; but around the shrine of Temple "A", both east and west, was a thick and widespread deposit of decayed wood, amongst which survived many inlays of bronze and fayence with royal names. Perhaps the choicest of these relics is a charming little jewel of solid gold three centimetres high in the shape of a king kneeling and offering bowls of wine. Another great find of bronzes, etc., was on the floor of the second court of Tirhaqa's temple, where a prodigious bonfire had been made of the temple furniture, presumably by the troops of Petronius: figures of deities, bronze fittings of shrines and even stone implements from the votive offerings in the treasury lay here in profusion amongst remains of wood, network cloth, palm stems and coarse grass which survived in a charred state, together with the very lamp which started the bonfire.

'It is a remarkable fact that the plan of Tirhaqa's temple at Kawa coincides in almost every detail with that of his much more ruined temple at Sanam, excavated by us in 1912-1913.'

The Expedition last season, composed of Dr. M. F. Laming Macadam (Worcester College), Mr. Roy Pennison, Mrs. Kirwan, and the writer, arrived at Kawa on November 4th, 1935. Having plotted the whole area covered by the ancient town and temples into squares of equal size, we embarked on our first task, the clearing of the vast quantities of sand which had encumbered and, in some places, buried the various monuments since their excavation in 1930-1. This was to enable Dr. Macadam to make a final collation of the numerous and important inscriptions covering the temple walls and to enable our architect, Mr. Pennison, to make plans and other drawings of the buildings themselves.

Apart from this clearance of the known monuments, the season's work was mostly devoted to the excavation of three main sites within the presumed Temple Area. The main feature of Site I (see Fig. 1) was a large mound, covered by a mass of potsherds, lying behind and slightly to the north-east of Temple 'T'. Site II included a long line of superimposed mud-brick buildings which lay parallel with the south wall of Temple 'T' and were separated from it by a narrow lane. Site III consisted of the unexcavated areas in front of the First Pylon of Temple 'T' on either side of the paved processional way, and the large area of unexplored drift-sand which lay to the south of the Western Kiosk and to the east of Temples 'A' and 'B'. In addition, the ground immediately to the north of Temple 'T' was examined, and a few trial trenches were sunk in the north town site.

SITE I

The large mound covering the best-preserved portion of this area was littered on the surface with fragments of small conical pots of baked clay. Without exception they had been carefully smoothed inside, though the outside is, in most cases, only roughly shaped by hand (see Fig. 2, no. 3). The use of these small vessels is uncertain. Similar examples may be found near the Temple of Taharka at Sanam, among the ruins of the temple on the island of Argo, at Faras, and at other ancient sites in the Northern Province. Some have also been recorded from Egyptian sites. Below this layer of sherds was a thick deposit of burnt wood-

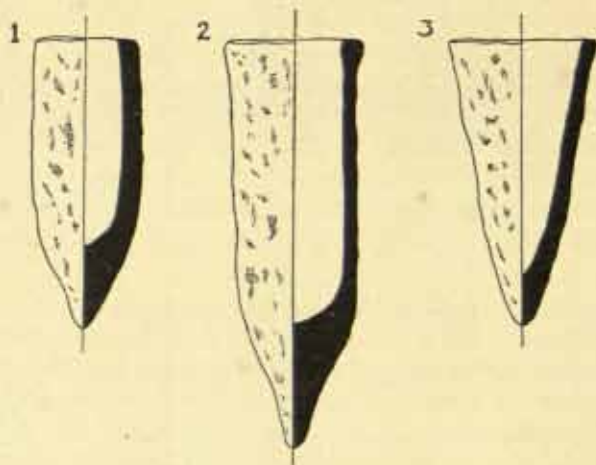


FIG. 2.

1. Napatan. Site I, House 1, Room 5. 1:4.
2. Napatan. Site I, House 1, Room 6. 1:4.
3. Meroitic. Mound. 1:4.

ash and other debris, including animal bones. Covered by this mass of sand and rubbish was the north-east corner of a great mud-brick temenos wall, which, to judge by its position in relation to the Temple of Taharka, is probably the work of that king. Against the inner face of this wall were a number of mud-brick buildings at different levels (see Fig. 1). Excavation revealed three main periods of occupation. The principal building, House 1 (see Pl. xxi, 1), belonged to the first period. The pottery from this level comprised most of the types occurring in the Napatan cemetery at Sanam.¹ During the second period a number of additions were made; the lane separating the house from the temenos wall was blocked and Rooms 4 and 5 were added. The thickness of the walls and the staircase in Room 1 may indicate that there was a second floor above this central group of rooms. Another staircase in Corridor 10 led to the platform above the granaries. The house, having fallen into ruin, seems to have become partly buried, for the fragmentary walls of period three were built on the debris covering the earlier building. The upper part of the north wall of the granary, however, was rebuilt, and it is significant that the east end of this wall rested on bricks fallen from the inner face of the temenos enclosure. In the same way, it can be seen (see Fig. 1) that the east ends of the walls of House 2 cut into the ruined face of the temenos wall, showing that in this third period the latter was already considerably delapidated. It is difficult to assign a

¹ Cf. Griffith, *The Cemetery of Sanam*, in *Liverpool Annals* 10, Pls. xvi-xviii. Many of these types, especially the two-handled jars, occur at a much later date; as, for instance, in the foundation deposits of Nalmaqaya (538-533 B.C.) and Astabargamen (503-478 B.C.) at Nuri.



1. Site I, House 1. In the background is the temenos wall of Taharka



2. Site II. Foundations of early temple pylon and north wall running below the Temple of Taharka



3. Site II, House 2. Pit with amphorae, from the north-east



4. Sunk 'bed' with brick border, containing four amphorae, in front of north pylon tower of Temple of Taharka. Looking south-east



5. Site II. Brick-bordered 'bed' with trees



6. Site II. 'Bed' with trees, showing the heightened brick border, and gutter on the left

date to these later houses. No Meroitic sherds were found in the upper levels. On the other hand, the pottery differed little from that of the earlier buildings. If, indeed, they are as late as the Late Napatan period, the buildings in this part of Site I must have been buried below the sand by the time of Augustus, when the Eastern Palace was in use, and have become a convenient rubbish-heap for the neighbouring Meroitic houses.

Between the Eastern Palace and the east wall of Temple 'T' were the scanty remains of a large number of Meroitic houses which extended a short distance to the south, cutting through the remains of the great temenos wall and leaving no trace of its south-east angle. These houses, denuded by sand and wind and cut into by diggers for *mārōg*,¹ were found ruined down to the lowest course of their foundations. Though this part of the site was thoroughly trenched no buildings were found sufficiently intact to warrant a more extensive excavation. It is evident, however, that in the first century B.C. and the first century A.D. this part of the site was intensively occupied. During the succeeding centuries these houses along the desert edge fell a prey to the sand which had threatened to submerge Gematon even in Taharkā's day, when the great enclosure wall was still standing.

SITE II

The huge banks of sand in front of the pylon towers of Temple 'T' covered, we supposed, the temple gardens. Little trace was left of the gardens of Taharkā's day. The ground on both sides of the paved processional way had been levelled and laid out afresh in the Meroitic period. Opposite the north tower of the First Pylon was a small, stone-lined pond. A little beyond it, to the west, was a circular sunk 'bed', bordered by a brick ledge with a stone drain, in which were standing four tall amphorae² (see Pl. xxi, 4). A similar 'bed' had been sunk opposite the south tower, but this contained no amphorae. The rest of the gardens had been roughly paved with sandstone chips, though traces of leaves and brushwood along the north and south edges may suggest that trees had been planted there.

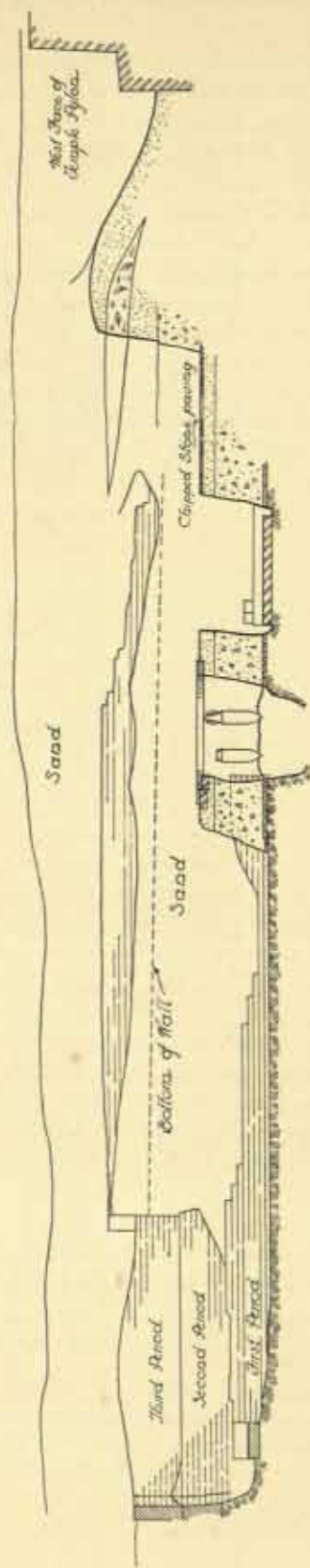
Excavating still deeper in front of the north tower, we came upon the foundations—surrounded by a deposit of ash and burnt matter—of the pylon of an earlier temple (see Fig. 3 and Pl. xxi, 2). Clearing westwards along this low level we encountered a number of mud-brick walls,³ mostly fragmentary and of uncertain plan, some running below the Meroitic temenos wall (see Fig. 3) and along the north side of the Western Kiosk. The small amount of pottery from this level appeared to be mostly of New-Kingdom date. In 1931, in this vicinity, was found a fragment of the base for a criosphinx inscribed with the cartouche of Amenophis III. Possibly, then, we have here the remains of a temple of the Pharaoh who, as Professor Griffith suggested, gave to Kawa the name Gempaton. This season we were concentrating on the monuments of the Napatan and Meroitic periods and, owing to pressure on our time, the excavation of remains below the level of the Temple of Taharkā had, for the time being, to be abandoned. Out of piety, Taharkā had erected his great temple on the site of the earlier temple and in exact alignment with it.

The interpretation of the mass of brick store-chambers stretching parallel with the south wall of Temple 'T' proved a difficult problem. In Meroitic times walls had been added to, destroyed, rebuilt, and inserted in the most haphazard manner. At length, however, three main periods of occupation were discernible. Below the Meroitic Houses 2 and 3 were the

¹ ماروق (*mārōk*), the Sudanese equivalent of the Egyptian-Arabic *sebakh*.

² Amphorae of similar type seem to have been found in the tomb of Amanitenmēmize in the North Cemetery at Meroe (c. A.D. 50-75). Cf. Reisner, *The Pyramids of Meroe* in *Museum of Fine Arts Bulletin* 21, 15.

³ Marked 'First Period' in Fig. 3.



TEMPLE OF TAHARQA

Area to West of First Pylon

Section shewing stratification



Reference —

	Stone		Walling in areas and Brackets
	Brick		Sand
	Unadorned Sand		Dark soil, Rubble and Scattered Clay
			Burial Layer

Roy, 1936

Fig. 3.

ruins of well-built magazines and granaries of the Napatan period. Below House 3, at this low level, we found a broken openwork ring with an inscribed bezel in the form of a double cartouche; a Cypriote sherd of about the seventh or sixth century B.C.;¹ and parts of a large granite statue including a human head, once completely gilded, wearing ram's horns. The workmanship of this head is poor and it is certainly a good deal later in date than Taharka. Not far away and on the same level was a Greek sherd, probably of Clazomenian (not Attic) ware and perhaps of the sixth century B.C.² The Cypriote sherd and the associated objects were sealed below the lowest Meroitic floor of House 3, while the Greek sherd came from the sand beyond the walls.

Built on the ruins of these Napatan granaries was a large number of small store-rooms of Meroitic date. These fall into two main blocks, designated House 2 and House 3. The space between these blocks of buildings, opposite the south door of the Hypostyle Hall of Temple 'T', seems then and in the Napatan period to have been left free, possibly to allow a way from the temple to a south door in the temenos wall, giving access to the main part of the town. At the east end of House 2 was a rectangular pit with a brick-bordered edge and a stone drain on the west side (see Pl. xxi, 3). In this pit were standing two amphorae, one of the type found in the 'bed' in front of the Pylon, with graffiti in Greek and Meroitic, the latter hardly legible. The significance of this pit with the amphorae in relation to House 2 is something of a mystery.

The third period discernible is late Meroitic, provisionally assigned to the third or fourth century A.D., and marked by the rebuilding of Houses 2 and 3 and the construction of House 1 between them and opposite the south door of the temple. By the time this rebuilding had taken place the lane between the houses and the temple wall had become so filled with sand as to cover completely the lower courses of the walls of Houses 2 and 3, the remains of the first Meroitic occupation. All these late Meroitic buildings, we found, had been partly destroyed by fire. House 1 had been burnt to the ground, and late Meroitic pottery lay embedded in a mass, which covered the floor, of fallen brick and wood-ash from the roof. Below this floor and still in position were a number of earlier Meroitic vessels. Neither they nor any of the pottery on this first Meroitic level showed any trace of burning, nor did the lower courses of the walls of Houses 2 and 3, which, by the late Meroitic period, were buried in the sand. Subsequently we discovered that this fire extended to the late Meroitic houses on Site 3 and elsewhere, blackening the walls and columns of the temples; it was started perhaps by the raiders who had set alight the temple furniture in the second court of the Temple of Taharka.³ As far as the buildings of Sites 2 and 3 are concerned the destruction seems to have been decisive: a few feeble attempts at patching and rebuilding were made, but it seems that this calamity brought to an end at least the settled occupation of these areas.

A short distance to the south of these buildings a row of trees⁴ had been planted within circular brick borders (see Pl. xxi, 5, 6), in one side of which was a stone drain for irrigation purposes. At the west end of this row of trees was a large well shored up with stout wooden beams, of which little remained. The well contained no recognizable Meroitic sherds, and this, in conjunction with the fact that the south wall of the Meroitic House 2 passed over the top

¹ Cf. Myres, *Cesnola Collection* (Metropolitan Museum of New York), 707 (pp. 88, 89). A Cypriote flagon of Graeco-Phoenician date was found in the Napatan cemetery at Sanam; see Griffith, *Oxford Excavations in Nubia*, in *Liverpool Annals* 10, Pl. xxxi, 8.

² I am indebted to Professor Beazley for this information.

³ See p. 202 above.

⁴ Kindly identified by Dr. Chalk of the Imperial Forestry Institute, Oxford, as being of the family Sapotaceae and very like *Butyrospermum parkii*, the Shea Butter tree. The Egyptian *šub*, usually identified with *Mimusops Schimperi* (cf. Wb. d. äg. Spr., IV, 435), perhaps included the above species also.

of it, shows that it was no longer in use at that time. Clearing southwards from this row of trees we had hoped to find the south wall of the temenos enclosure, which, if the temple had been situated roughly in the centre, should not have been far off. But no trace of it was found. The foundations of a number of much destroyed brick buildings were unearthed, but all these proved to be late Meroitic in date.

SITE III

This area, from which much had been hoped in view of the proximity of Temples 'A' and 'B', was disappointing. The remains of a large number of late Meroitic houses were uncovered; they were apparently contemporary with the latest buildings on Site II, and like them were partly destroyed by fire in ancient times. More recently, diggers for *mārōg* had removed most of the walls, leaving little but a few isolated stumps. Our men in the course of their work turned up several baskets and hoes belonging to these earlier excavators, whose researches, it should be said, must have been undertaken before the present administration in the Sudan, at a time when digging for *mārōg* on ancient sites was less rigorously penalized.

We cleared the whole of this area east of temples 'A' and 'B', and immediately south of their sanctuaries as far as the wady which marks the northern edge of the town. Near the surface, south-east of the sanctuary of temple 'A', we found a small bust of a young man, an excellent piece of work belonging perhaps to the time of Tutankhamūn. Originally the figure (Pl. xxii, 1-3) had been complete, with an inscribed pillar down the back. Continuing along the east side of Temple 'B' towards the Western Kiosk, we uncovered another row of trees (*Persea* or *Mimusops* sp.) planted in a line with the south wall of the building (Fig. 4). In later times this area had been built over, and one of the trees was found below the floor of a late Meroitic house.

The antiquities this year were not outstanding either in number or quality. In the sand to the east of Temple 'T' we found a charming silver ornament¹ in the form of a sun-disk with delicately engraved horns and a double uraeus in front (Pl. xxii, 4). No doubt it had once surmounted a ram's head. Site I yielded a number of blue glazed objects, mostly broken, among which were some finger-rings, like those from Sanam,² inscribed with the $\frac{1}{6}$ formula. The moulds from Site III are interesting; one of them may be for the manufacture of beads. In House 1 near the Western Kiosk, we discovered a curious bronze object, with a double cartouche in relief on the side (Pl. xxiii, 1, 2). Its use is obscure, but the holes near the rim for nails, and traces of wood inside, suggest that it may have surmounted a wooden pole, perhaps a flag-pole. The cartouche on the left, apparently reading 'Watemarēshē', may be that of the Queen; the one on the right, containing the name Amankhabale, is identical with the cartouche on the chest of a small sandstone lion from Baṣa.³ No other instances of the name seem to be known. The hieroglyphic characters used in both cases suggest that the name may be assigned to the period of the four unnamed kings⁴ who reigned between Shanakzekhtē and Amanshakhetē (i.e. between c. 125 and 45 B.C., according to Dr. Reisner's reckoning).

An interesting discovery in the upper Meroitic levels of Site II was a number of green stone celts. It may be that they are not contemporary, but such celts, apparently confined to

¹ Compare those from the tombs of Taharka and Nalmataya at Nūri published by Reisner in *Museum of Fine Arts Bulletin*, 16, 72.

² *Liverpool Annals* 9, Pl. lxi, 3; *op. cit.* 10, Pl. xl, 26.

³ See Griffith, *Meroitic Inscriptions*, I, 70 (No. 46).

⁴ Reisner, *The Meroitic Kingdom of Ethiopia*, in *JEA* 9, 75, 76.



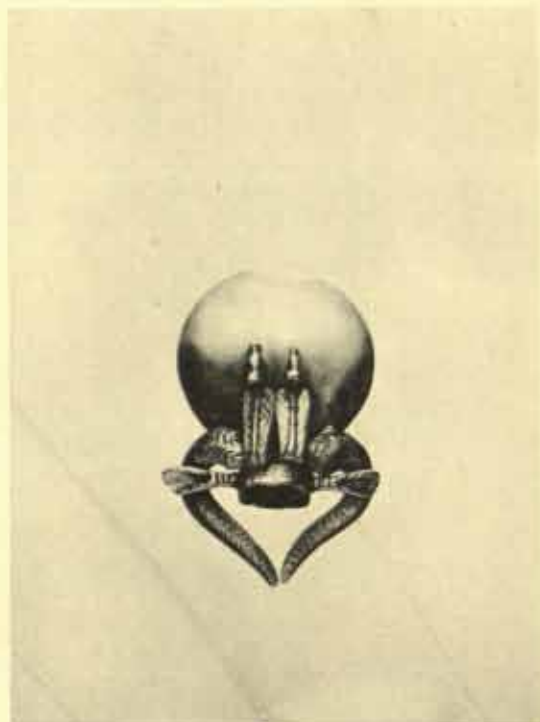
1



2



3



4

1-3, Granite bust from Site III. Full size
4, Silver ornament from Site I. Full size

Badarian and Predynastic deposits in Egypt, are of wide distribution in the Sudan, occurring in Predynastic and 'C-group' settlements. They may be related to those found in the Libyan desert¹ with sherds that may be Meroitic.

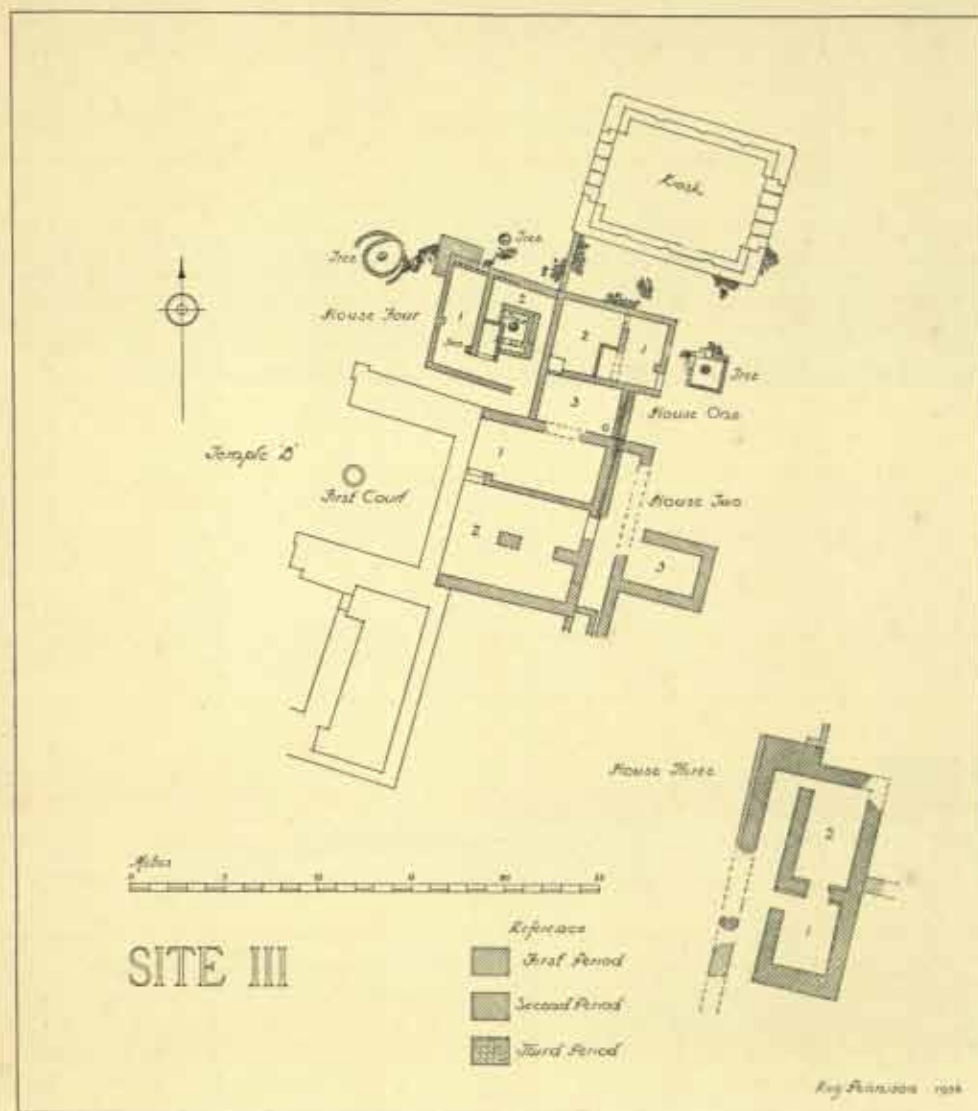


FIG. 4.

There is no doubt that the history of Gematon goes back to early times, possibly to the Middle Kingdom. While searching² for the north-east corner of the early temple, perhaps that of Amenophis III, we sank a deep trench along the north side of the Temple of Taharqa. At a depth of 4.20 metres below the bottom of the temple plinth we came upon the founda-

¹ Cf. Newbold, *A Desert Odyssey of a Thousand Miles*, in *Sudan Notes and Records* 7, 62; *op. cit.* 11, 165. Cf. also Emery and Kirwan, *Excavations and Survey between Wadi es-Sebua and Adindan*, Fig. 83.

² This wall seems either to have been removed or to run directly below the north wall of the Temple of Taharqa.

tions of two walls of red brick, each about 0.65 metres wide, running south below the north wall of the temple. The few sherds in the vicinity were indeterminate in character, but the depth at which these walls were found suggests that they are earlier than any of the buildings so far found within the temple area.

At Kawa, as at Napata, there are signs of a revival of building activity after the disastrous invasion of Petronius in 23 B.C. The rebuilding of the granaries and houses on Site II, the construction of the crenellated temenos wall¹ to the north of the Western Kiosk and Temple 'T', even the erection of the Kiosk itself, may have been due to the energetic Amanshakhete and her son-in-law Netekaman, who reunited the Meroitic Kingdom by absorbing the Second Meroitic Dynasty of Napata. Graffiti² on amphorae from the lowest Meroitic buildings in Site II show that these were probably occupied at least as late as the second century A.D. It is unlikely, therefore, that the upper Meroitic levels can be assigned to a period much earlier than the third century, or later than the fourth, for no trace of the so-called 'X-group' pottery was found. It is not surprising that the Meroitic remains at Kawa belonging to the early centuries of the Christian era are comparatively poor. Under Netekaman (c. 15 B.C.–A.D. 15), Meroe, situated amidst more fertile country four hundred miles farther south, became once more the chief centre, and the arid northern province sank into the background. It is worthy of note, however, that the latest buildings at Kawa, most of them destroyed by fire, seem, at present, to belong to the time when Meroe and the adjacent country to the north was subject to the successive raids of the Nôba and the Axumites, culminating in the fall of the capital before the latter towards the middle of the fourth century A.D.

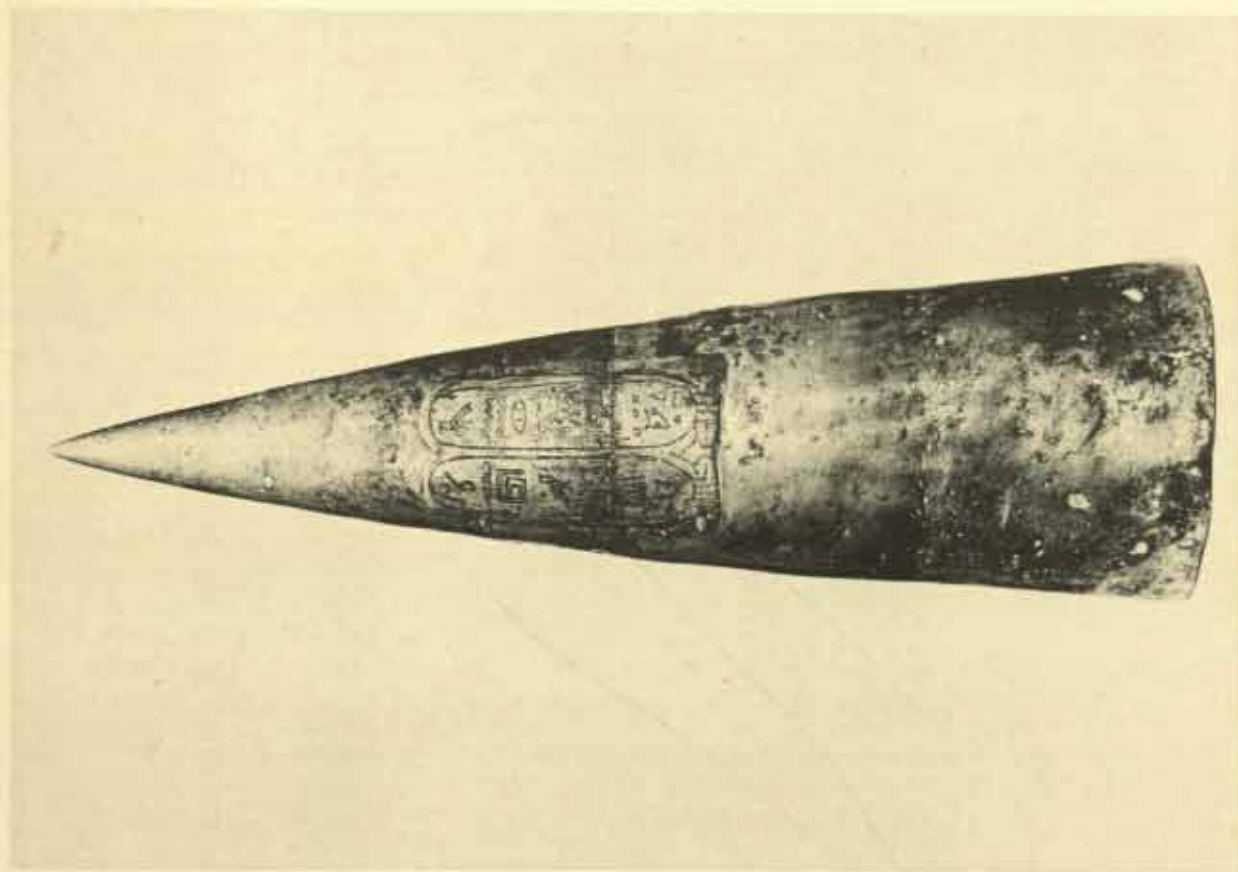
One phase of the work this season hardly comes within the scope of a report on excavations, though it involved a month of our time. That was the removal from the Temple of Taharka of two unique monuments, the Shrine of Taharka and the Wall of Aspert. The blocks in both cases had been sadly weakened by fire in ancient times. Further, since their exposure in 1930 a heavy fall of rain had not improved the condition of the soft Nubian sandstone.³ The removal of the sculptured walls of the Taharka Shrine was further complicated by the fact that the heavy roofing-slabs were still in position. The interior of the shrine was filled with sand, and ramps of sand were built up against the four walls of the shrine on the outside. The slabs, some already split, were levered on to wooden rollers set on wooden rails and thus rolled down the sand slope. A consignment of two hundred and thirty-three large boxes was forwarded to the Ashmolean Museum, where these unique monuments are to be re-erected. That the Expedition was permitted to retain these monuments as part of the 1931 share of antiquities is a notable example of the generosity of the Sudan Government in such matters. Other parts of the temples of special interest, and liable to collapse or to further deterioration through exposure, are being removed by the Sudan Antiquities Department to Khartoum, where they can be adequately protected and, it is hoped, ultimately re-erected.

There are many signs of large cemeteries in the desert to the east of Kawa, and these, with the extensive town site, remain to be explored. The excavation of the town, a centre of importance from very early times, should throw much light not only on the history of a large and important Egyptian colony but especially on one period in the history of the Sudan still

¹ This wall was later destroyed and rebuilt. See 'Third Period' marked in the section, Fig. 3.

² Mr. C. H. Roberts, of St. John's College, Oxford, kindly informs me that the best-preserved of these graffiti (on an amphora from the pit at the east end of House 2) might be assigned to the second century A.D., with a possibility that it might fall in the first half of the third century.

³ The blocks in each case were treated with a cellulose preservative. Our thanks are due to Mr. Lucas of the Cairo Museum for advice in this matter, and to both him and Dr. Nelson of the Chicago University Institute, Luxor, for their assistance in procuring the large quantity of preservative necessary.



1. Conical bronze object with name of Amankhabale. Scale 1 : 3



2. Detail of No. 1

most obscure: the time between the last known¹ Egyptian viceroy, under Ḥerihōr, and Piankhy.

In conclusion, the writer would like to record his indebtedness to his colleagues Dr. Macadam and Mr. Pennison; to the Sudan Antiquities Department, represented by Mr. G. W. Grabham, for every assistance; and to Mr. Purves, Governor of the Northern Province, Mr. Cullen, District Commissioner at New Dongola, Mr. Dunbar of the Sudan Railways, and to many other officials of the Sudan Government who have helped the Expedition on so many occasions during the last season.

¹ One excepts Eshons, queen of Pinōtem II, who was given the honorary title 'King's son of Kush, overseer of the Southern lands'; cf. Reisner in *JEA* 6, 53.

POSTSCRIPT.—A reconsideration of the 'pit with amphorae' on Site II (*cf.* p. 207 and Pl. xxi, 3) suggests that the pit may be the lower basin of a wine-press, the upper basin, in which the grapes were trodden with the feet, having been removed during the later Meroitic occupation. The grape juice flowed down the inclined drain into dolia, or possibly directly into amphorae which were partly sunk in the ground to keep the liquid at an even temperature. For references see Emery and Kirwan, *op. cit.*, I, 109 ff.

NOTES AND NEWS

THE expedition to Nubia is actually launched. Mr. H. W. Fairman, who has already spent several winters on the Society's excavations, arrived at Sesebi at the end of October, accompanied by Mr. E. A. Green, who was trained at the Liverpool School of Architecture, and Mr. J. G. Griffiths, a Fellow of the University of Wales and the holder of a Research Studentship at Liverpool University. Professor Blackman joined the party early in December as Field Director, and hopes to be able to continue work on the site for about four months.

Mr. J. D. S. Pendlebury, Mr. R. S. Lavers, and Miss M. S. Drower have gone out to Tell el-'Amarnah with the intention, as stated in our last issue, of completing the work of planning the Great Temple, of which much was excavated last season.

The President has again sent an expedition to Armant under the auspices of the Society. Mr. Oliver H. Myers, who will be accompanied by Mrs. Myers, is again Field Director, and Mr. R. S. Lavers joins the party as architect on the completion of the work at Tell el-'Amarnah. The staff also includes Miss Drower, whose work as epigrapher last year was of great value, Mr. J. Grant Macdonald, a new recruit, and Mr. P. S. Hardie of Alexandria. Dr. Hans A. Winkler is attached to the expedition; his main work, however, is the examination and recording of the rock-drawings in the neighbouring hills, a task upon which he has been engaged for some time.

Work on the temple of Sethōs I at Abydos recommenced very early this autumn, as it was decided to make a great effort to complete the field-work for Vol. IV in a single campaign. With that object in view, Miss Calverley (who is accompanied, as previously, by Miss Broome) was fortunate enough to secure, each for a few months, the services of Mr. Leslie Greener and Mr. R. C. Martindale; both these gentlemen had been hitherto employed by the Oriental Institute at Karnak under Dr. Nelson. For various reasons the actual publication of Vol. III must be deferred until Christmas, 1937; but Vol. IV ought to follow within a further period of six months. Vol. IV is to contain the whole of the great Hypostyle Hall, and will unfortunately be the last volume that can be accomplished within the exceedingly generous grant made by Mr. J. D. Rockefeller, Jr. By his munificent help all those parts of the temple which deserved reproduction in colour will have been put in the hands of students of Egyptology. Considerable portions of the temple will still remain to be published, and for that purpose strenuous efforts will have to be made to secure adequate financial assistance elsewhere.

For the benefit of those who have not seen our last Annual Report we add some details to those given on p. 248 of the preceding volume regarding last season's work at Armant, which continued until mid-May. The pool in the town was identified as the Lake of Cleopatra; much of its walls, and its stone stairway, were discovered. Part of a pylon of Tuthmosis III, built to celebrate his victories, was found; on its north face is a fine procession of negroes bearing spoils from one of the king's Nubian campaigns, headed by a rhinoceros of which the exact dimensions are given in an adjoining inscription. (Only one other picture of this

animal seems to be known; it was formerly at El-Dêr el-Bahri.) Fragments of a stela describe the capture of this animal. North of this pylon are remains of the foundations of the great Ptolemaic temple, made of blocks, some finely cut and coloured, from temples of the Middle Kingdom and of Tuthmosis III. Parts of over twenty statues and colossi were found, including two fine heads of the Eleventh Dynasty and the Ptolemaic Period respectively.

Well-attended lectures, illustrated with lantern slides, were given this autumn by two of our Field Directors, under the Society's auspices, at the Royal Society's rooms, Burlington House: 'Last Season's Work at Tell el-'Amarnah', by Mr. Pendlebury, on 29 September, and 'The Temples of Armant', by Mr. Myers, on 3 November.

We offer hearty congratulations to our Honorary Treasurer on his election to the Camden Professorship of Ancient History in Oxford University. Professor Last's new position, by the way, has necessitated his migration from St. John's College to Brasenose College.

We remind our readers that the Entrance Fee previously payable by new members has been suspended for a limited period, and we invite existing members to make this fact known to friends who may be thinking of joining the Society.

All members of our Society will be gratified to know that, in honour of two of the scholars to whom we have owed most in the past, B. P. Grenfell and A. S. Hunt, the Fifth International Congress of Papyrology will be held in Oxford. The proceedings will occupy the five days from 30 August to 3 September, 1937. Papyrologists who wish to read papers are invited to inform Mr. C. H. Roberts at St. John's College, Oxford, sending him the title of the proposed paper (which may be in English, French, German, Italian, or Latin), together with a brief statement of its contents, and an estimate of the time needed for its delivery, which should not, except in special cases, exceed twenty minutes. A detailed programme of the sessions, with particulars of visits to places of interest and other information which may be of use to those attending the Congress, will be sent out in due course.

Elections were made recently to the Fellowships in Egyptology, at University College, Oxford, and Christ's College, Cambridge, which have been founded with ample endowments under the will of the late Sir Ernest Budge. We desire to congratulate the two Lady Wallis Budge Fellows, namely, Mr. A. N. Dakin, formerly of The Queen's College, Oxford, and Mr. C. R. C. Allberry, previously a Research Fellow of Christ's, Cambridge, and engaged in editing some of the Coptic Manichaean treatises. Both distinguished themselves in classics before embarking on Egyptian studies; and it may be useful to budding Egyptologists to be aware of the growing tendency of those responsible for choosing among aspirants to Egyptological posts to give the preference to candidates whose knowledge and competence extend beyond the limits of Egyptology itself.

M. Jacques Vandier has been appointed Attaché to the Department of Egyptian Antiquities of the Musée du Louvre in succession to Canon Drioton.

Much interest attaches to the large limestone stela reported to have been found recently by Professor Selim Hasan near the Sphinx, with an inscription of the second year of Amenophis II, in which the king records a visit paid by him to the pyramids of his ancestors Cheops and Chephren, and also vaunts his athletic prowess. Amenophis is stated to boast that he rowed a boat for three miles with an oar 20 cubits long without fatigue, when his rowers had

tired after half a mile, that he trained his horses so that they could gallop without sweating, and that he had, while riding in his chariot, shot arrows clean through copper targets as thick as his hand. The last statement recalls the remarkable inscription found some years ago by M. Chevrier at Karnak, in which the same king is stated to have shot from his chariot arrows which stuck out three palms behind a tablet of bronze three fingers (?) thick; 'when he shoots at bronze tablets he smashes them like papyrus; he does not consider any wood worthy of his strength'; also of the men and horses which he captured *höchsteigenhändig* in his Asiatic campaign, and several other references to his feats and strength. These statements are evidently different from the conventional phrases which mechanically ascribe mighty deeds to kings who waged war; and they are the more welcome because of the great rarity of authentic indications of royal personality in Egypt.

We have received the following interesting communication:

'A prize of £50 is offered for an Essay in English on some archaeological or ethnographical subject (not mainly linguistic or literary) connected with Prehistoric or Pharaonic Egypt.

'The essay should show original research. The words "archaeological" and "ethnographical" are to be interpreted in the widest sense. The subject may be selected by the candidate himself, and the essay should be illustrated by as much comparative matter as possible from other lands, whether ancient or modern. The utmost use should be made of photographs and drawings.

'The prize will be awarded only if one of the essays submitted is of sufficiently high standard to warrant it.

'Mr. K. de B. Codrington, Dr. Margaret A. Murray, and Mr. G. A. Wainwright have kindly consented to act as adjudicators.

'The candidate may be of either sex and of any age. The essays should bear their title, and should be accompanied by a covering letter. Only the covering letter, *not the essay*, should be signed. Essays must be typewritten, and must be sent in before Dec. 31, 1937, to Mr. J. H. Hay, Solicitor, 29 Bedford Square, London, W.C.1, who will give each essay a number and forward it to the adjudicators. Other correspondence should be addressed to Mr. G. A. Wainwright, 26 Elm Park Gardens, London, S.W.10.'

Papyrology has for long been so exclusively identified with Egypt that the discovery of papyri by the Colt Expedition of the British School of Archaeology in Jerusalem at El-Anja el-Hafia, not far from Gaza, has come as a great surprise; some particulars, for which we have to thank Professor J. L. Myres and Dr. H. I. Bell, will no doubt be welcome. The papyri were found in two rooms; they are in Greek and Arabic, and some are of considerable size. One of the longest of the Greek documents (which are of the sixth century) is of the reign of Justin II, and concerns litigation about an inheritance; another is a letter directing that a guide to 'The Sacred Mountain' be chosen, and containing an assurance that he may be certain of his pay; others are receipts. The Greek literary pieces include a fragment of a life or martyrdom of St. George, and several pages of a codex with a Latin-Greek glossary to Aeneid iv. Five Arabic-Greek bilingual documents of the late seventh century are the earliest dated Arabic writings known in Palestine; they are *entagia* (of the same type as the Aphrodito papyri), and concern the payment of tribute by the Arab provincial governor. There are also Arabic letters, one of which refers to the protection enjoyed by non-Muslim monotheists in Nusar who paid poll-tax. The papyri have been entrusted to Dr. Kraemer, of New York, for publication.

The Keeper of the Department of Egyptian and Assyrian Antiquities, British Museum, informs us that the present temporary Students' Room of the Department will be closed from January 1, 1937, for an indefinite period, owing to removal. Notice of the reopening of the permanent Students' Room will be published in due course.

The news that the Oriental Institute of the University of Chicago is obliged henceforth to restrict its activities for financial reasons will be received with the deepest regret, and much sympathy will be felt with Professor Wilson that his appointment to the Directorship in succession to the late Professor Breasted should coincide with such a restriction. That the achievements of the Institute—to consider Egyptology alone—have been splendid beyond all dreams of a decade or so ago is witnessed by the superb volumes devoted to the temples of Medinet Habu and Karnak, and to Mrs. Davies' copies of paintings, not to speak of the admirable publications of the Prehistoric Survey of Egypt, and of the Coffin Texts. It is not for us to discuss the reasons for the present curtailment, but they are said to be compelling and inevitable. Meanwhile, all Orientalists will wish to pay a tribute of gratitude to the munificent donor to whose generosity scholars owe such wonderful accessions to their knowledge and their libraries.

The excavations of the Royal University of Milan at Medinet Mādī in the Fayyūm are to be continued this winter, under the direction, as before, of Professor Vogliano. The *Primo rapporto degli scavi condotti dalla Missione Archeologica d' Egitto della R. Università di Milano nella zona di Madinet Mādī (campagna inverno e primavera 1935—xiii) a cura di Achille Vogliano* has just been issued. It is a volume of viii+88 pages, with a map and 17 plates. We look forward eagerly to a publication of the last season's remarkable find—a temple of the Middle-Kingdom, Ramesside and Ptolemaic periods, dedicated chiefly to Ernūtet and Sobk, and very well preserved (even the roof being extant, though fallen), with inscriptions of Amenemmes III and Amenemmes IV, including a list of benefactions to the temple.

Professor A. C. Johnson of Princeton is initiating a series of papyrological publications to be known as *Princeton University Studies in Papyrology*. The first volume in the series, *Papyri in the Princeton University Collections*, Vol. II, is at the moment of writing (November 1936) expected shortly; it will contain 93 texts with brief introductions and commentaries. The second will be a work by Dr. Wallace on taxation in Roman Egypt.

Papyrologists, and all whose work brings them into touch with papyrological studies, will be glad to know that the library of the late Professor Hunt, rearranged and brought up to date, and including books from the collection of the late Professor Grenfell, is now available for use in the Ashmolean Museum, Oxford. This library (probably the most extensive private one of its kind) now includes over 800 volumes; perhaps the most valuable part of it is the collection of offprints, dating from the early days of papyrology to recent years, and now bound up under subject-headings into over seventy volumes.

Mr. C. C. Edgar has kindly undertaken to supervise the publication of all articles and reviews in this *Journal* relating to papyrology and other Graeco-Roman matters—with the exception of the Papyrological Bibliography, of which Mr. T. C. Skeat remains the General Editor. Manuscripts and correspondence dealing with these matters should therefore be sent directly to Mr. Edgar, at Vauréal, Berkhamstead, Herts., and not to the Editor. Review copies of works of similar reference should of course still be sent to the Secretary.

We offer congratulations to our President on his election to membership of the Académie des Inscriptions et Belles-Lettres in succession to the late King Fuād.

NOTICES OF RECENT PUBLICATIONS

The Treasure of El Lāhūn. By H. E. WINLOCK. New York, the Metropolitan Museum of Art, 1934. 4to. xvi+80 pp., 16 pls., 5 figs. \$4.00.

The author has given us in this book a very detailed description, and fine illustrations, of the jewellery found by Professor Sir W. M. Flinders Petrie at El-Lahūn in 1914, part of which is in the Cairo Museum, and part in the Metropolitan Museum of Art, New York. He also gives us his various reasons for the way in which the various jewel-caskets and ornaments have been restored and assembled. Archaeologists may rejoice that this treasure should have been acquired by one of the very few public institutions in the world, if not the only one, wherein a felicitous combination of skill, enthusiasm, time, and means, could enable this reconstruction to be carried out. The result is a model which will serve as a guide to the better arrangement of the Dahahūr jewellery at Cairo; but owing to the lamentably incomplete condition of the latter, and the casual and meagre record of its discovery, it will be almost impossible to achieve much in the way of actual reconstruction. The present writer hopes, however, in the near future, to make an attempt to bring some order out of chaos.

The author has been more than kind in his references to this reviewer's share in the excavation of the jewellery recess in the tomb. Some damage unfortunately *was* inflicted, as a deep scratch on one of the crown streamers will bear witness. Actually only the first night was spent in the tomb. After that, reliable guards were left at the mouth of the pit every evening; but little traps were laid, and it is certain that nothing was ever touched except by the excavator. The great difficulty of recognizing objects when first found was due to the poor light and to the fact that they were coated with mud; for instance, it was realized that some of the ivory was inscribed with hieroglyphs only after it had been cleaned at the house. Further, the writer is glad of this opportunity to point out that he is by no means as responsible as Winlock suggests for the reconstructions as shown in *Lahun, I*; he never had any access at all to the jewellery after it had left the recess. Some of the slips in the cataloguing &c. which Winlock has pointed out are due to this. Footnote 9 on p. 6 should be amended: the scale, 1:150, is given on Pl. xxii of *Lahun, I*, at the top.

Before the actual reconstruction of the jewellery is considered, there are a few points which may be noticed.

Page 3. There were not four burials of princesses at El-Lahūn, only two. Tombs 9 and 10 were certainly never used. Both are double tombs, upper and lower, and the entrance to the pyramid was through 10. There is very good reason to suppose that Tomb 7, which had been used for a burial, was the tomb of Queen Weret. When *Lahun, I* was written, her existence was uncertain. But two cylinders of 'the King's Wife, United to the White Crown, Weret' are known, one belonging to the late R. H. Blanchard, and the other one in the Insinger collection; also a seated statue of her was recently found in a Government excavation at Elephantine. All of these are as yet unpublished. She certainly therefore existed; and she can be identified with the queen who died during the reign of Sesostriis II, is twice named on fragments from El-Lahūn, and who had a statue in the Kahūn temple. We may perhaps infer that she was the mother of Sitjhathor-Yunet, and that it was in order to be with her that the latter was buried close by. The present writer quite agrees that this princess was never a queen (p. 26).

Page 6. There was no sign of a pavement round the pyramid. If the ground inside the stone wall was merely surfaced with a thick layer of brown flint pebbles, it seems unlikely that there was paving outside it, between the stone and brick walls.

Page 7. Although Winlock's theory as to events in the tomb before and after the burial explains most of the conditions found in 1914, it does not explain all. A difficulty is the complete absence of sand and stones in the recess, and a similar absence of mud in the antechamber, at any rate to the high level at which it was found in the recess. This can be explained fairly easily by supposing, what is most likely, that the recess was bricked up at the time of the burial. This wall was masked by the slope of sand and stones which came in with the robbers from the filling of the shaft, and kept the recess undisturbed. Even if a little of the wall remained exposed, it might easily have passed unnoticed by the plunderers in the dim light; the mud

brick was much the same colour as the *tafl* rock. The subsequent flooding gradually dissolved the bricks, from the top downward, and the water poured into the recess. Why this water was so charged with mud and so free from sand is a little difficult to understand. Probably, as no blocks of stone were found at the entrance of the antechamber such as were used in Tomb 7, the antechamber was closed, like the recess, with a thick walling of brickwork. The great brick enclosure-wall close by at the surface would also have supplied mud, especially the initial deposit which was in the tomb before the burial.

Page 13. Surely the knobs of the casket should be described as copper rather than bronze, judging from the analysis. But it is interesting to know that the razors were definitely of bronze.

Pages 58, 59. That the cowry girdle was given to Sithathor-Yunet when young may be inferred from its somewhat damaged condition when found, indicating considerable use. It would seem, too, that cowries were generally worn by young girls rather than married women. On the other hand, the obsidian vases are likely to have been a gift from Amenemmes III; the only Dahshūr examples are associated with a pectoral of his, and the similar vase found at Byblos actually bears his name.

Pages 68, 69. The present writer considers that the set of eight alabaster vases was much more probably used during life than provided for the funeral. That they were all alike is no proof of the contrary, as the certainly ritual jars of Nubhetepty-khred were not. The names of the oils were incised on the lids of the funerary jars of the best class, and were written in ink on the inferior sets only. The box which contained the El-Lahūn vases was not in the least like the four ritual boxes which have survived from Dahshūr. The contents of the El-Lahūn jars are not at all like those in the jars from Dahshūr; in the latter they vary according to the labels, and sometimes fill the jars. There is evidence, from the one lid found in the plundered offering-chamber, that ritual jars had been placed there, their natural position. It is likely, then, that the El-Lahūn vases are of the same nature as those of the first and second treasures at Dahshūr, where in each case eight alabaster toilet-vases, all uninscribed, were placed with the jewellery in the *cache*.

Turning now to the actual reconstruction of the jewellery, there are a few, but very few, criticisms to offer. It is for the most part convincing. It is based partly on comparison with other examples, partly on a close study of the actual material, the numbers of beads, their sizes, and so forth. To use a living model of likely size on whom to fit the jewellery was an excellent practical idea. But it is possible that the measurements of the princess were not the same throughout her life. It is reasonable to suppose that she may have been considerably plumper in middle or old age, when her later jewels were given to her. Further, it is not quite so certain as Winlock thinks, that he had all the beads at his disposal. It is not impossible, as has been pointed out in *Lahun, I*, that minute beads of faience or frit may have completely disappeared in the damp mud. The large pieces of faience casket-inlay have barely survived. Now there is a peculiar and entire absence of small dark-blue ring-beads. Can this not be explained by supposing that they were once there, but were composed of some material imitating lapis-lazuli which has entirely disintegrated? An example of some such material occurred in the tomb of Senebtisi, where it had gone brown, although there was no flooding like that at El-Lahūn (*The Tomb of Senebtisi*, 61). If this hypothesis is correct, there is no necessity to make the bracelets of such small dimensions, or to eke them out with the gold beads and spacers.

Page 8. It would seem that the gold-leaf found with the crown could hardly have been washed into the recess as Winlock supposes. It was found too closely connected with the other objects. It must, of course, have been the covering of something made of wood, or more likely of stuccoed cartonnage. There does not seem to have been enough of it for vulture wings such as Queen Teti-shery is shown wearing on her statuettes. And there is perhaps too much for a vulture like that on the crown of Khenmet at Dahshūr, with its outspread wings. So that neither of these suggestions seems very probable.

Page 18. The reconstruction of the box for the alabaster vases was made, as Winlock admits, before *Lahun, I* was published. On p. 25 of that book the arrangement of the ivory veneer is described as a succession of rectangular slips, one broad alternating with two narrow (*not* frames or 'false doors'). The excavator preserved a series of these in order exactly as found; they were more or less complete and of equal lengths. But they must have got scattered in the subsequent handling and packing.

Page 25. The threading of the gold beads on the wig as shown on Pl. iii is not really satisfying. Somehow one feels that a better arrangement might have been arrived at. The scattering of the seven finer gilded plaits in among the thicker ones is not convincing; one would have expected the finer ones to have been together at the front. Women in the Middle-Kingdom tomb-scenes are generally shown with some of their hair hanging in front of the shoulder and the rest at the back. Queen Nefret and the daughter of Dhut-hotpe have horizontal bands running round the masses of hair on each side of the face, and these bands could have been of gold. A chequered arrangement of the beads, like that shown on the little wooden female head of the

Middle Kingdom from Lisht (Lythgoe, in *Bulletin of the Met. Mus. of Art*, 1907, 163), would have given a far more pleasing effect, and would not have involved the use of any greater number of plaits, as there are as many plain as gilded plaits on Winlock's wig. Winlock thinks that there is no way of fixing the rings so as to scatter them separately. But surely the rings were worked in when the wig was made, and a few strands of hair, which would not be noticeable, might have been left outside each ring as the tresses were being plaited.

Page 29. There can be no question, considering the material available, that the suspension of the pectorals by means of drop and ball beads is correct. To use the amethyst beads for this purpose seems perhaps a little unexpected, but there were drop beads of amethyst at Dahshūr which were perhaps used on a similar string. It is to be noticed that the Middle-Kingdom pectorals of Queen Nefret and the daughter of Dhutyhotpe are shown hanging, not from drop and ball beads, but from a ribbon (of beadwork?) divided into square sections. Perhaps the drop and ball method of suspension which was so common in the New Kingdom was an innovation in the Twelfth Dynasty and was not represented by the artists, ruled as they always were by rigid convention. A minor point which is of some interest is that the rings at the back of the three Sesostris pectorals are placed for threading horizontally, while on the two pectorals of Amenemmes they are vertical; this may imply some change in the manner of suspension of which we do not know the nature.

Page 43. The mounting of the wristlets and anklets is not altogether satisfactory, as Winlock admits. His motives for the arrangement are twofold: (1) to make them of a size suitable for the very small limbs, and (2) to use up the remainder of the beads, both simple and multiple. The first motive is sound, but the second is not, especially when it involves departures from the customary. It seems wrong to place the long gold spacer-bars next to the clasps, which themselves serve as spacers. Seven instead of five coloured panels in the wristlets, and nine instead of seven in the anklets, are indicated. This need not necessarily increase the length of the ornaments, but might reduce the width of the coloured panels. Further, the five-bead spacers in the wristlets are redundant; beads were often, perhaps always, strung on stiffish fibres, and the threads should not sag if tightly fastened at the ends, especially if the panels were made a little narrower.

It is now suggested that there were originally dark blue beads as well as carnelian and turquoise; that these were about equal in number to the gold beads, both single and multiple; that these blue beads were used in place of the gold; and that the coloured panels were in the following order:

Wristlets: green, blue, red, green, red, blue, green.

Anklets: green, blue, red, green, blue, green, red, blue, green.

The number of beads required would then be about

2,216 carnelian (or 159 less than there are);

3,772 turquoise (or 7 more than there are);

2,664 blue (in place of 2,512 gold including multiples).

It follows from this that some other use must be found for the surplus of gold beads. Both at Dahshūr and Lisht (Senebtisi) the square multiples are strung together as ribbon-necklaces with shell pendants. As there are no pendants at El-Lahūn and only comparatively few multiples, these latter may have there served their proper function as spacers in bracelets with plain gold beads in between. There could have been seven square multiples in each bracelet of a pair, and eight (or more) 5-bead spacers in each bracelet of another pair; and the knot-clasps could have been used with them. It would be interesting to make a practical test of this suggestion to judge the effect. Both Queen Nefret and the daughter of Dhutyhotpe are shown wearing some sort of plain bracelet or bracelets above their panelled wristlets. As there are more than enough of the little gold ring-beads to make up these bangles, the surplus could be used as single-string necklets from which to hang the inlaid clasps, like the amulets at the neck of the Twelfth-Dynasty kings on the statues. A *shen* amulet was worn in front of a necklace by Senebtisi (Pl. xxiii). Some of the similar inlaid clasps from Dahshūr have rings along the base for the attachment of dangling beads, which would have been quite unsuitable on the wrist. It seems probable, then, that all these ornaments were hung from short strings at the neck, short enough to require a fastener.

GUY BRUNTON.

An Ephemeris of 467 A.D. By HEBER D. CURTIS and FRANK E. ROBBINS. University of Michigan Press, Ann Arbor, Michigan, 1935. 34 pp., 3 pl.

The three fragments which are the subject of this study originally formed part of a codex containing an astronomical ephemeris. They cover parts of the first three months of the Egyptian year A.D. 467, and it is probable that each page of the codex contained the ephemeris for one Roman month.

Fortunately, fairly complete directions (including details of rulings and spacings) for making an astronomical ephemeris have come down to us from antiquity. These are found in certain manuscripts of a treatise attributed to Theon (c. A.D. 400), and apart from the omission of a few unnecessary columns, they correspond almost exactly in every detail to the ephemeris under consideration. These directions, supplemented by the authors' own lengthy and laborious computations, have enabled most of this interesting document to be reconstructed.

In its thirteen columns are set out successively (1) the numbering of the weeks, (2) the Roman year, (3) the Alexandrian, or Egyptian, year, (4) the lunar months, (5) the daily position of the moon (expressed by sign, degree, and minute), (6) the hour of passage from sign to sign; the daily positions of (7) the sun, (8) Saturn, (9) Jupiter, (10) Mars, (11) Venus, and (12) Mercury, and, finally, (13) the designation of the particular day as 'good', 'bad', 'indifferent', 'bad at beginning', 'good to 6th hour'. This last column shows that the purpose of the document is not purely astronomical. Apart from this column, the ephemeris is, in effect, a primitive nautical almanac, more elaborate than any other of which an example has been preserved to us. There are three interesting entries referring to the moon, of which one may be quoted: 'Conjunction on Phaophi 16 at the 4th hour of the day, Libra 1[9]^o 22'.

The document is therefore of the greatest historical importance, as it is accurately dated by internal evidence to A.D. 467. A study of the entries identified the year for which the ephemeris was compiled as an Egyptian leap-year, with new moons on September 14 and October 14. This narrowed the inquiry to only six Egyptian leap-years, of which A.D. 467 seemed the most probable. An entry stating that on October 29 Mars entered the sign Virgo 'at hour 10½ of the day' enabled the editors to decide on A.D. 467. There are few Greek documents that can be dated with greater precision.

Dr. J. K. Fotheringham has pointed out (*Classical Review*, Dec. 1935, p. 242) that the positions of the heavenly bodies were actually calculated from the Manual Tables of Ptolemy. He does not agree with the authors' interpretation of *EKAI* or of the entry in col. 6 for Sept. 27. The computations used in the reconstruction have been made for 6 p.m. Alexandria mean time. In a private communication made since the appearance of the *Classical Review* notice Dr. Fotheringham makes the following additional observations. The ephemeris is computed for 6 p.m. mean time of the Manual Tables. The mean times of the Manual Tables are reckoned by mean days and hours, from solar noon at Alexandria of the epoch-date of the Tables, namely November 12, 324 B.C. The epoch-date of the Almagest Tables (c. A.D. 100) is February 26, 747 B.C., and 5.24 p.m. Alexandria mean time of these Tables is equivalent to 6 p.m. Alexandria mean time of the Manual Tables, or 5.41 p.m. Alexandria mean time as we reckon it. The difference between the two values of the mean time is a consequence of the difference between the values of the equation of time on the two dates chosen as epochs for the respective tables.

Amplified and partially emended by these studies of Dr. Fotheringham, the results of the painstaking and laborious work of Messrs. Curtis and Robbins are of far-reaching importance and form a valuable contribution to our knowledge of astronomical science in the fifth century A.D. It is to be hoped that this happy collaboration between an astronomer and a papyrologist will continue to produce equally noteworthy results.

R. W. SLOLEY.

Koptische Heiligen- und Märtyrerlegenden. By W. TILL. (*Orientalia Christiana Analecta*, 102.) Rome, 1935 xv+210 pp., 6 facs.

This is a very interesting collection of texts from the Vienna Library, formerly of the Rainer Collection, all Sa'idic from the White Monastery at Atripe. It is unfortunate that pp. 7-48 are cited incorrectly in the table of contents on p. xiii: each number four too many—a strange oversight. The six pages of reproductions at the end of the book would be far more useful for palaeographical purposes if they had been executed by a photographic process; the method used, lithography from tracing, is not satisfactory. Apart from these minor defects the book is altogether admirable, giving a number of texts which include some hitherto unpublished. The texts given (with translations and critical notes) are Vienna K. 391, 7587-8, 9398, 9437-9, 9442-3, 9445-50, 9453-6, 9482-6, 9488-93, 9501-2, 9506-12, 9515-16, 9524-6, 9539, 9544-6, 9613-15, 9621, 9772-5. All these are fragments torn by unscrupulous dealers or ignorant peasants from volumes which once formed part of the Library of the White Monastery. Other leaves from the same volumes are to be found in the Vatican Library, the Bibliothèque Nationale, the British Museum, the Bodleian (lent by the Clarendon Press), and other collections. It has been Till's task to put together these scattered fragments and so to restore

as nearly as possible the consecutive text of the original volumes, a task which has grave limitations as many of the folios are still unidentified. This tearing and scattering of manuscripts is one of the peculiar difficulties which face any attempt to classify the Coptic material in European libraries. As shown in this book, Till has carried out his task with great care and marked success. Some of the narratives are already known from other sources—the subject-matter of some is found in Arabic in the *Synaxarium*; but there is a quite considerable amount of fresh material which makes this a serious and valuable contribution to Coptic hagiography.

DE LACY O'LEARY.

Littérature chrétienne antique et papyrologie. By W. DEROUAUX, S. J. Paris (1935). 34 pp. (Reprinted from the *Nouvelle Revue Théologique*, Tournai and Paris, September-October, 1935.)

This essay gives a summary account of the rise and progress of papyrology to the present time, and points out the various results obtained from the study of papyri. The new literary works made known from this source are not very numerous, but include some valuable material. Of religious bearing are several apocryphal books, some already known by name from patristic references, and a good deal of fresh material throwing new light on Gnosticism and the Manichaean religion. Valuable in another way are the early biblical fragments which antedate any previously known codices and modify assumptions already formed as to their date. Of value also are the numerous private letters and documents which have furnished so many additions to our vocabularies. The author makes special reference to the Coptic papyri, which include both Coptic versions of Greek works and original material. This essay brings forward no new views, but is a useful and reliable summary of work the historical importance of which has only recently been adequately recognized. The writer's theme is that while the chief impetus to historical research in the nineteenth century came from epigraphy, that in the twentieth century may be expected to come from work on the papyri.

DE LACY O'LEARY.

The Letter of Aristeas, A linguistic Study with special reference to the Greek Bible. By H. G. MEECHAM. Manchester, 1935. xxi+355 pp.

The letter of Aristeas has an Egyptian bearing, as it is of Alexandrian origin and describes the Egyptian origin of the Septuagint. 'Notwithstanding the fact that it is unauthentic, it has come to be recognized as a useful source of information regarding both Egyptian and Palestinian affairs in the second and even the third century B.C.' (p. 2). This is a convenient edition of the text, taken from Thackeray's text published in Swete's *Introduction to the Old Testament in Greek*. It is principally a study in Hellenistic Greek, mainly devoted to an examination of the vocabulary and grammar of the epistle. The work originated in a thesis for the degree of Ph.D. in the University of Manchester. It is well printed and the notes on the subject-matter contain a good deal of useful material. It has, of course, no bearing on Christian studies other than its philological references.

DE LACY O'LEARY.

Der Obelisk und seine Basis auf dem Hippodrom zu Konstantinopel, mit einem Beitrag von Friedrich Krauss. By GERDA BRUNS. (Istanbuler Forschungen, herausgegeben von der Abteilung Istanbul des Archäologischen Institutes des Deutschen Reiches, Band 7.) Istanbul, 1935. 92 pp., 89 pls.

The subject of this detailed publication is the exiled obelisk which stands, with its neighbour the Serpent Column from Delphi, in the Hippodrome at Stamboul. Originally intended by Constantine the Great to adorn his new capital city Byzantium, it was removed by him from Karnak together with its fellow, but lay for years neglected at Alexandria; the Emperor Julian brought it to Stamboul, and not until the reign of Theodosius was it finally erected in the place where it now stands. Concerning the method of its transport, a task such as taxed the ingenuity of even nineteenth-century engineers, history is unfortunately silent.

The present work opens with a chapter of bibliography, accompanied by reproductions of early engravings and Oriental paintings in which the monument figures. An account of the obelisk, with a translation of its inscriptions follows; more important, however, than these, which are of no special interest and have been published before, are the Byzantine reliefs sculptured round the base, and to them a long descriptive chapter is devoted. On each of the four sides the Emperor is shown with his court witnessing some spectacle in the Hippodrome; the scene which has most interest for Egyptologists is that of the raising of the obelisk, the only instance in antiquity of the pictorial representation of this difficult manœuvre. Mr. Engelbach, in his

ingenious book *The Problem of the Obelisks*, puts forward a suggestion as to the method employed by the ancient Egyptians. The mechanical resources of Roman engineers were greatly increased by the introduction of the capstan and the pulley; in this relief a system of block and tackle is shown working in conjunction with four capstans. The author points out that the well-known copy of the seventeenth-century engraving of Spots and Wheeler reproduced by Gorrington is misleading, the artist having attempted a fanciful reconstruction of missing ropes. From a careful study of the relief itself she concludes that the obelisk was erected in much the same manner as was the Paris obelisk in 1836; at the same time she is resigned to the impossibility of reconstructing the operation in detail, since the stone is sadly weathered, and further it is in any case unlikely that a strictly accurate representation of the scene was attempted. A small point of interest is the attempt of the Byzantine artist to reproduce in his relief the hieroglyphs on the obelisk.

The book is generously illustrated, and many of the photographs are supplemented by sectional enlargements to bring out every available detail of the important scenes. The convenience of being able to lay any plate separately alongside the descriptive text probably outweighs in this case the disadvantages always experienced with loose sheets of illustrations. Measurements and detailed plans are supplied by Herr Krauss. The volume is in short another example of that thoroughness which we have learned to expect from the work of the German Archaeological Institute.

M. S. DROWER.

Walters Art Gallery: Handbook of the Collection. Baltimore, Maryland, 1936. 8vo. 177 pp., 198 illus.

This handbook covers as much as can be displayed at once of the art collection presented to the city of Baltimore on the death of Henry Walters, of the Atlantic Coast Line Railway, and assembled by him and his father, William T. Walters, between 1850 and 1931. The collection contains art objects from seventeen different countries and periods, and only a few pages are devoted to Egypt and to Coptic art. The required minimum of information about Egypt is imparted with a conciseness which only rarely gives the reader trouble. The letterpress gives no description of the objects in the collection (a detailed catalogue is in preparation), but there are twelve photographic reproductions of objects ranging from the Old Kingdom to the sixth century A.D. and including statuary (a good Old-Kingdom *Ka*-figure in wood, a king's head which seems to resemble that of the seated Ramesses II of Turin, a 26th-Dynasty kneeling statuette of one Horwedja, a fine bust which is almost certainly from the same period, and a bronze standing Amūn inlaid with gold), a slab from an Old-Kingdom mastaba with female dancers in relief, figurines, faience cups, etc. The objects from the Coptic period are an ivory box, a fragment of textile depicting a horse, and a good piece of an animal frieze from one of the monasteries, all dated to the sixth century.

A. N. DAKIN.

Les Antiquités égyptiennes du Musée de Vienne (Isère). By ALEXANDRE VARILLE. (Bulletin de la Société des Amis de Vienne, Nos. 27 & 28.) Vienne, 1932. 18 pp., 4 pls.

This is a short guide to the Egyptian objects in the museum of Vienne, to the number of seventeen. By far the largest portion of the work is devoted to the description of a single object, a fragmentary stela of one *Rmsse-m-pr-Rt*, a Semite who rose to hold various important offices under Ramesses II and Merenptah. The stela was intact at the end of the nineteenth century, but now only a portion of the lower third is extant. How it came to be in this condition is unknown, but with the aid of a partial squeeze and a clearly somewhat inaccurate drawing made during the last century M. Varille has been able to make some indication of its original form. The four plates are all illustrative of this reconstruction, and include the facsimile of an inscription upon one other object in the collection.

M. F. LAMING MACADAM.

Histoire du costume dans l'antiquité classique: L'orient. By LÉON HEUZEY and JACQUES HEUZEY. Paris, Société d'édition 'Les Belles Lettres', 1935. vii + 148 pp., 59 pls., 141 illus. 150 frs. net.

The modes of dress which prevailed in ancient Greece and Rome are much more familiar than those of the eastern countries dealt with here. One reason for this is that the artistic conventions of these eastern countries were less naturalistic, and do not permit of such a clear conception of the garments worn. It is true of most ancient representations of dress that they fail to give a clear idea at once of the form of the constituent parts of the dress, of their adjustment, and of the effect of the whole in conjunction with the body.

Despite the difficulty of the subject, MM. Léon and Jacques Heuzey have brought to their study a clarity

of description and a soundness of detail which are enhanced by the abundance of attractive illustrations. The nucleus of the book was written by M. Léon Heuzey, and was first published after his death in the form of articles; M. Jacques Heuzey has added the sections concerning military, sacerdotal, and feminine dress, together with the chapters on Syria, Phoenicia, and the Hittites. The first part is devoted to Egypt, and the second to Mesopotamia and the adjoining regions. Fashions of dress among the Sumerians, Babylonians, Assyrians, Persians, Hittites, Syrians, and Phoenicians are shown to have been on the whole more sumptuous and decorative than in Egypt. The sections are subdivided through separate treatment of the dress of men, women, priests, and warriors. The fifty-nine plates (two of which are coloured), are excellent. Notes are added to the text, together with an index and a bibliography. Full references are given to the illustrations in the text and to the plates, but not to the illustrations in the notes. The reference to Pl. ix is incorrect.

Was the wearing of animal-skins in Egypt confined to priests? It is here mentioned under that section only (p. 25). Erman states that leopard-skins were used by both sexes in the Old Kingdom as a festal dress, but that in the later period they were confined to certain priests (*Ägypten und ägyptisches Leben*, 2nd ed., pp. 232, 235, 337; *Life in Ancient Egypt*, trans. Tirard, p. 450). Bénédite states that in tombs of the Old Kingdom the leopard-skin is the characteristic dress of the proprietor of the tomb (*Mon. Piot.* xxiv, p. 52; cf. Lefébure, *PSBA* 15, p. 438). Herodotus says (II, 104) that both the Colchidians and the Egyptians were *μελάγχροες καὶ οὐλότρυχες*, but it is not clear that he refers to the wearing of animal-skins. A possible, but doubtful, example of non-sacerdotal use of the animal hide occurs in Blackman, *Meir*, IV, Pl. viii.

J. G. GRIFFITHS.

The Excavation of Medinet Habu. Vol. I. General Plans and Views. By Uvo HÖLSCHER, and Foreword by J. H. BREASTED. (The University of Chicago Oriental Institute Publications, Vol. XXI.) Chicago, 1934. Large Folio. xiv + 6 pp. and 37 pls. (3 coloured). \$22.

Medinet Habu. Ausgrabungen des Oriental Institutes der Universität Chicago: ein Vorbericht. By Uvo HÖLSCHER. (Morgenland, no. 24). Leipzig, 1933. 58 pp., 29 pls.

In his latest general book, entitled *Architecture, Lethaby*, a considerable writer on the subject, devotes a sixth of his space to Egypt. The many other lands and schools down to modern times have to share the rest of the space between them. He sums up his remarks on p. 65 by saying: 'To a large degree Architecture of wrought stone is an Egyptian art.' The architecture of Egypt is, therefore, worthy of very serious study, and it is perhaps surprising how very little work has been done on this most impressive of the country's arts and crafts. The author of the present work has, however, given us a considerable portion of what has been written on the subject. One of these earlier works, *Das hohe Tor von Medinet Habu*, actually dealt with the site to which he now returns.

The present volume is a notable addition to our publications on the subject. It deals with the architecture and plans of the complexes of various dates grouped around what is now the main centre of attraction—the temple of Ramesses III. An important discovery is the plan of a temple outside the Great Girdle Wall; it had been built by Eye and Haremhab. Earlier still, Amenhotep III had done some work on that site, but not enough is left to say what he had in mind; in any case it had nothing to do with any later temple.

The author and editor lament the loss of the masses of information that has taken place. Like others before him Prof. Breasted in his foreword voices the now hoary complaint against the double disaster that has attended archaeology in Egypt; it is due in the first place to allowing the natives to carry off *sebak* without efficient supervision, and in the second to clearances carried out in the name of archaeology but incompetently. It is now too late to save Egypt, but it is to be hoped that the lesson has been learned by those countries where archaeology is still in its infancy.

In the manner of mud-brick towns, the houses of Coptic and Mediaeval Jēme had at last risen to a height of fifteen metres above the pavements of the Great Temple. The town of Jēme lasted on into the ninth century A.D., when it was abandoned by its inhabitants, who took with them everything worth removing. This abandonment of ancient cities is a curious problem; it is to be found at an earlier date at the Graeco-Roman cities of the Fayyūm, and earlier still again at the cities of the Indus Valley in India.

A valuable criterion as to water conditions is provided by the inscription of the seventh year of Ramesses IX. This shows that the normal flood-level of to-day is about 50 cms. above what was an extraordinarily high one for the year 1135 B.C. The ground water was of course correspondingly lower, so that the buildings all stood comfortably high and dry. In fact to the visitor arriving by boat along the canal the quay wall

must have towered up in a forbidding fashion. One wonders what was the real purpose of the rectangular platform that is marked 'quay' on the plans.

The cubit used in laying out the temple of Eye and Haremhab and that of Ramesses III was the usual one of 20½ inches.

An interesting discovery is that of the house of Butehamūn, royal scribe in the Theban necropolis in the Twenty-first Dynasty. Not only does it give a perfectly definite dating to its level, but it increases our intimacy with an official who is already well known to us. The texts on one of his coffins were used by Schiaparelli as a foundation for his monumental work *Il Libro dei Funerali*. Two of his coffins are in Turin, another containing his mummy is in Brussels, and his house, we now know, is still at Thebes. The family can be traced for at least six generations; graffiti referring to them have been found at Thebes, and letters which Butehamūn received from his father are now deposited in various museums of Europe. Professor Capart has put together an interesting account of him in the *Bulletin des Musées royaux du Cinquantième*, Brussels, 1935, pp. 111-13.

Professor Hölscher gives a useful résumé of work done on the site of Medīnet Habu since travellers began to notice it in the seventeenth century.

The Epigraphic Survey has already published several volumes on Medīnet Habu, and these have taught us what to expect. The present volume is of the same *format* and up to the same high standard of quality. It perhaps seems ungracious to criticize so magnificent a publication, but it is a reviewer's duty to say what he thinks. In this case he cannot but feel it a pity that the colouring of the plates should not be more satisfactory; they are altogether too dim and grey. Similarly, seeing the perfection to which aerial photography has been brought, he finds it strange that photographs so blurred as those in Pls. 35, 36 should have been passed for publication. With these exceptions there can be nothing but praise for the new volume.

Attention is also drawn here to the booklet by the same author on the results of the excavations and planning of Medīnet Habu. It is a handy little statement of what has been discovered, and the reviewer is interested to note that the question he asks above as to the purpose of the 'quay' is also asked by the author. Another astonishing detail emphasized in the present publication is the barrel vaulting of mud-brick, which was set upon the stone pillars and architraves of Ramesses III's First Palace, and repeated on a larger scale in his Second Palace.

The plan of the Second Palace is entirely different from that of the First. The robing- and throne-room complex in the First Palace proves to have been a smaller edition of that of Ramesses II at the Ramesseum, with scarcely any variation. In one feature, however, the copy falls far short of its prototype: while Ramesses II left a wide space between his central columns in the temple to give a good view of the Window of Appearance, Ramesses III did not. The pillars of the later temple are also much grosser and heavier, the result being that when the king did appear, he could have been visible to only a very few of the courtiers. The clumsy pillars practically obscure not only the window, but even the walls also.

Plates 24-8 are interesting, showing the growth of the little Eighteenth-Dynasty temple by the addition of halls and porticoes in front. This of course repeats in miniature the history of the Great Temple of Karnak. One of these accretions provides the interesting information that after some 450 years the great mud-brick enclosure-wall of Ramesses III was falling to ruins. After this lapse of time Shabaka was able to build his pylon to the little temple right over the foundations of a part of it. Unfortunately we have no clue as to when, or by whom, it was breached. One can hardly think that Shabaka could have done so merely to give room for his pylon.

Medīnet Habu proves to be an important site architecturally. Not only have we the brick barrel-vaulting of Ramesses III, but one of the tomb-chapels of the Twenty-fifth Dynasty is said to provide our earliest example in Egypt of a true barrel-vault in stone. But Somers Clarke and Engelbach, *Ancient Egyptian Masonry*, pp. 186, 187 and figs. 222, 223, should be consulted for fuller details of the construction of some of these stone arches.

G. A. WAINWRIGHT.

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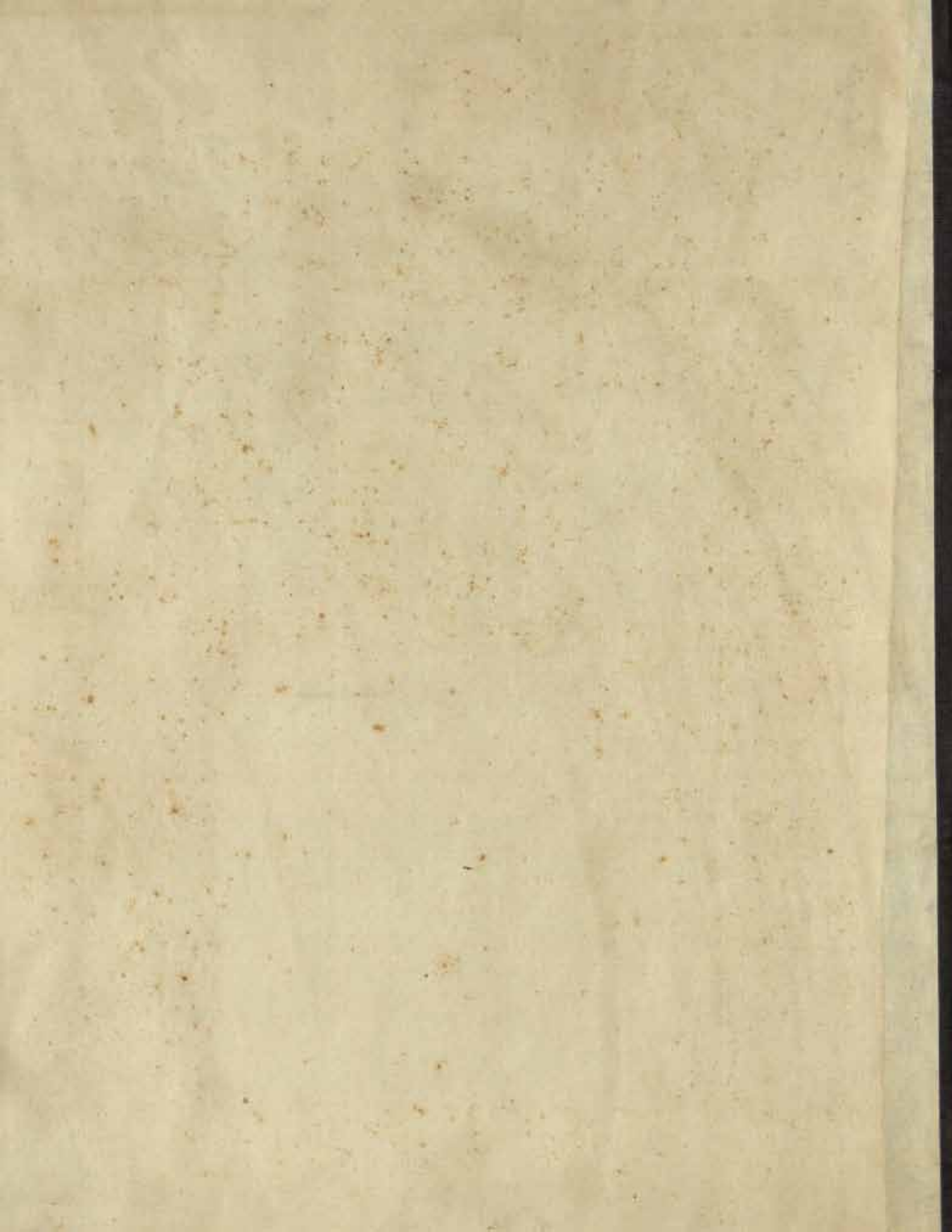
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